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The University of Alberta

Career Development: An Integrated Approach

by

Bernice Koch

A Thesis

Submitted to The Faculty of Graduate Studies and Research

in Partial Fulfilment of the Requirements for the Degree

of Master of Education

in

Counselling Psychology

Department of Educational Psychology

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THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Reseach for acceptance, a thesis entitled Career Development: An Integrated Approach submitted by Bernice Koch in partial fulfillment of the requirements for the degree of Master of Education.

DEDICATION

Two roads diverged in a wood, and I..
I took the one less travelled by,
And that has made all the difference.
Robert Frost

I dedicate this book: to my family who supported me in my journey; although they didn't always understand "the quest."

My mother - in memory of your great enthusiasm for life.
My father - who continues to bring out the best in me.
My mother-in-law - in memory of your unequalled courage.
My Ivan - my earliest love and my abiding friend.
My Donna - my first born who brings me joy with her own quest.
My Brian - who pursues his journey in unique and exciting ways.
My Airin & Leah - who are truly Magical children.
My Rick - whose journey takes him to distant and dangerous places.
My Aunt Minnie and Uncle Henry - who have been my substitute parents, whenever I needed them.

To my friends who gave me "Hugs and Tears" therapy, models of risk-taking, conversation, materials, food and a sense of my own strength.

Diane, Angie, Irene, Norma, Myrna, Ruth, Vickie, Ilona.

ABSTRACT

The focus of this study was on the design, implementation and evaluation of a unit of instruction, "The Road Ahead," integrating English 33, language arts concepts and career education goals and objectives.

The design of the unit of instruction incorporated concepts as prescribed by the Senior High Language Arts Curriculum Guide, 1982 and broad career matrices as proposed by the "Policy Statement on Secondary Education" (Alberta Education, 1985), and more specifically a "Catalogue of Essential Concepts, Skills and Attitudes/Values", (Alberta Education, 1986). An interdisciplinary model of curriculum development by Kirman & Nay (1975) was followed.

Implementation of the unit of instruction, spanned a period of 10 weeks and involved 30 hours of instructional time. Two samples totaling 40 students were drawn from two high schools in the Yellowhead School Division.

The evaluation utilized primarily a quantitative approach, with a pre-test/post-test research design using experimental and control groups. Post hoc qualitative data involving participants' responses was also used. Measurement was done through the use of the Career Development Inventory (Thompson et al., 1979). This instrument purports to measure conative and cognitive aspects of career maturity. The conative aspects of the evaluation assessed the dimensions of planfulness and career exploration. The cognitive aspects focused on the dimensions of decision-making and

information related to work and preferred occupations.

The findings suggest that the unit was well-received and filled an educational need. The experimental group showed gains in the expected direction on all five dimensions. The unit appeared to facilitate conative aspects of career maturity as shown by a significant difference for group in career exploration and a significant treatment effect in career planning. A trend toward interaction in one cognitive aspect as measured by information about the preferred occupation was noted. Findings were used to recommend refinements in "The Road Ahead".

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CHAPTER I

RATIONALE, PURPOSE, DEFINITIONS AND THESIS PLANS

Introduction

In this chapter, the writer addresses four areas pertaining to this study. These are: 1) the rationale for investigation; 2) the purpose of the study; 3) the definitions; 4) the plan of the thesis.

RATIONALE FOR INVESTIGATION

The writer's dual role as a guidance counsellor and an English 33 instructor at Harry Collinge High School in Hinton, Alberta entailed dual responsibilities. One was the mandate to deliver Career Education services to students (Alberta Education, 1984, 1985). The second was to prepare grade twelve students enrolled in English 33 language arts with language arts skills. These grade twelve students, upon their graduation from high school, faced decisions that would culminate either in direct entry into the work force or in post-secondary studies.

A "needs" study conducted by the counselling department had given impetus for finding methods of delivering career education services to all students. In addition, "expressed needs" were supplemented by the observations of counselling staff that few students in the general program availed themselves of formal career planning services on a student-initiated basis. The realization that many of the English 33 students were "concerned" about their future prospects heightened the search for an efficient option for delivering career education. The option was found in Senior High

Language Arts Curriculum Guide, 1982, under the theme, "The Road Ahead." This option encouraged the classroom teacher to develop a unit of instruction focusing on language arts concepts related to career education goals and objectives.

Other professionals joined in the venture when the circumstances arose. The head of the English department became involved when this writer left Hinton to attend university and he undertook the instruction of English 33. At that time the unit was in a rudimentary stage. Through "field testing" various components of the unit, evidence for the compatibility of the two disciplines: English language arts and career education, was reinforced.

Refinements were made and the final draft of the unit of instruction was facilitated through the involvement of one of the professors whom the writer consulted about the project.

PURPOSE OF THE STUDY

The purpose of this study was 1) to investigate and assess a potential role of a cooperatively designed unit of instruction integrating career education and English language arts, within the language arts curriculum, at the senior high level; 2) to investigate any significant differences on a measure of career development, between the experimental group, receiving the unit of instruction, and the control group, receiving the regular English 33 curriculum.

DEFINITIONS

The following are definitions of terms used extensively in this study:

Work - Not just the job one does for income; it includes unpaid work and leisure activities - whatever the individual does to "become someone through doing something."

Career - "The totality of work one experiences in a lifetime" (Hoyt, 1974).

Occupation - A specific job or work activity.

Career Development - "An ongoing process of awareness, exploration and adjustment to the world of work that takes place throughout life. This process includes home, school and community experiences that influence an individual's self-concept, life style and occupational choice" (Alberta Education, 1984).

Career Education - Those planned for educational experiences that facilitate the individual's career development and preparation for the world of work. The totality of experiences through which one learns about and prepares for engaging in work and part of a way of living. A primary responsibility at the school with an emphasis on learning about, planning for, and preparing to enter a career.

Career Maturity - Vocational behaviour manifested by a person in coping with developmental tasks.

PLAN OF THE THESIS

The discussion in the preceding pages has highlighted the essential features of the study and explicated definitions which the writer subscribes to in the remainder of the report. Chapter II

examines the curriculum materials and the theoretical considerations upon which the study is based. Chapter III outlines the design, implementation and methods of evaluation of the unit of instruction. Following that, the research methods are given in Chapter IV. Chapter V deals with the quantitative findings of the study. Qualitative findings are reported in Chapter VI. Summation and Implications follow in Chapter VII.

CHAPTER II

Review of Related Literature

Introduction

The review of the literature for this study has been organized into two major areas: 1) those writings and publications that contributed to the development of the unit of instruction which is central to this study; 2) those writings that relate to the theoretical base that provided the framework for the development of the unit of instruction.

Part I: Curriculum Considerations

As stated in the "Rationale for the Study", in Chapter I, the catalyst for the undertaking of the study arose from two situations that were central to its inception. These situations were: 1) students in English 33 had expressed through a "needs" survey that they desired more career information and opportunities for career preparation and, 2) an option existed in the Senior High Language Arts Curriculum Guide, 1982 to deliver career education through the English 33 language arts theme outlined, "The Road Ahead."

A subsequent survey of the literature included the philosophical and applied aspects of both American and Canadian approaches to career education and English language arts. Specifically, a review of educational and psychological literature comprising the current curricula as well as publications directed toward future needs in English language arts and career education in Alberta, was conducted.

The development of the unit of instruction was based upon a philosophical conviction that the most efficient and effective method for delivering career education was by integrating it into the English language arts program. The reasons for this conviction are based on six contentions which divided the first part of the literature review into six topics. These contentions are that both English language arts and career education: 1) are basic to children's education; 2) provide enrichment for each other as well as increasing the relevance of each; 3) may increase childrens understanding of social reality; 5) have mutually inclusive goals and objectives; 4) are increasing in importance as Alberta Education prepares to meet the challenges of the future; and 6) have been proven through research to be amenable to integration.

Basic Components of Education

English Language Arts has for many years maintained a high profile in this province. A longer instructional time is allotted for elementary students in language arts in relation to other subject areas. In high school two streams: English 30 and 33 are offered. These streams culminate in departmental examinations. Universities and colleges in Alberta demand proof of writing competency from all entrants. Recognition that language arts is the subject most important to the success of students in their further education, their careers and their social lives, has been given by the Edmonton Public School Board. In it's draft entitled, "What are Schools For?" the reiteration that language and thought undergird

and support the entire curriculum, is given. Content area teachers are apprised of the importance of language and thought in concept development. The necessity of allowing students opportunities to talk to and listen to one another is emphasized. Language arts monitors and facilitates the developmental stages of an individual's growth in important ways.

Conversely career education in Alberta, at the time that this study began, has lacked formal authorization as a compulsory part of the education curriculum. As has been the case in other provinces across Canada, career education in Alberta has in the past, often been submerged in optional courses like Personal Living Skills, Guidance, Health and Personal Development, and others. The developmental approach to career education has thereby been neglected and the opportunity for students to avail themselves of comprehensive career education has been tenuous. The recent implementation of "Health & Personal Life Skills" curricula at the elementary and junior high school levels in Alberta schools addresses important aspects of career education. The "Career and Life Management" (CALM) course developed for high school students, which is now being developed with a view to implementation in the fall of 1988 encompasses one major theme and seven sub-themes relevant to career education. This three credit course is well-designed and offers grade 10's, 11's and 12's some exposure to career education in high school. It prescribes a time allotment of ten hours on the theme, "Careers and the World of Work." Provision

of flex-time for the themes most desired by the class and instructor could increase the time spent on "Careers and the World of Work," somewhat. A provision for the CALM program to be extended is also given (Alberta Education, 1985).

The question of whether career education will now be given the high profile it deserves in this province is unanswered at this time. The efficiency of the proposed delivery system is yet unproven. That career education deserves a high profile in any North American educational system is substantiated by several writers (Herr and Cramer, 1972; Hoyt, 1974; Tolbert, 1980; Healy, 1982). A Canadian Education Association Report (1983) addresses the preparation of youth for the world of work in stating:

> The kinds of competencies that can be considered essential for entry into the working life even at the elementary levels that have been illustrated are many and complex; and it is clear that not all new entrants are likely to possess them. Yet, the task of helping young people develop them is not too ambitious if schools and employers are serious about helping individuals become more independent and self-reliant and improve their lives at work and their productivity.

In the view of a number of writers, work and career are associated with purpose in life. Thomas Carlyle (1866) once stated: "It is the first of all problems for a man to find out what kind of work he is to do in the universe". Somewhat earlier a view advanced by the

philosophical premise of Lord Lytton (Lucille, 1860) noted that: "The man who succeeds above his fellows is one who early in life discerns his object and toward that object habitually turns his power." This quotation bears resemblance to evolving definitions of "work" and "career," as having unique roles in the shaping of each individual toward a purposeful destiny (Super, 1983; Hoyt, 1974). Agreement about the value of work and career are found in the goals of schooling defined by Alberta Education (1978), where it is stated that students ought to "acquire skills, attitudes, and habits required to respond to the opportunities and expectations of the world of work." Career education is thus seen as very basic to each individual's education. It seems a logical conclusion that both English language arts and career education should be given the highest profile, the best curricula, the best instruction that Alberta Education can afford them.

Enriching Content and Increasing Relevance

The second contention supporting the efficient delivery of career education through integration into the English language arts is that each may enrich the other. Several writers support such a notion (Davidson, 1980; Kaiser, 1980; Hoyt, 1974; Borhani, 1979). Studies reinforce the notion that relevance of each discipline improves by association with the other. A few writers discuss procedures for integration (Norbert, 1980, cited in Healy, 1982).

Davidson (1980) refers to career education in league with English language arts as reconciling the humane uses of English with

its practical applications. Kaiser (1980) contends that the language aspects of the language arts curriculum provides a rich reservoir of material beyond skills development that can be integrated with career education.

Hoyt (1974) believes that language arts can be made more relevant to students through an integrated approach. A Canada Manpower (1983) survey supports Hoyt's idea by citing that students perceive the subjects taken in high school as most relevent if they are applicable to some future endeavor. That is, how well the subject taken exhibited utility toward future career status. A study by Coleman & LaRocque, 1979, (cited in Mitzel, 1982), reported that high certainty of career plans in high school was associated with increased levels of students' perceptions of subject relevance. Students in general programs and early school-leavers represented lower levels of career certainty. Thus, these categories of students saw less relevance in the subjects studied in high school. Borhani (1977) feels that all subject matter is made more relevant through integration with career education.

Norbert (cited in Healy, 1982) describes a procedure involving values clarification for career planning purposes, by using poetry and lyrics. Such a procedure may be used effectively in conjunction with language arts. Healy (1982) is emphatic about the use of biographies for inculcating "successful" orientations to life and career concerns. Perhaps, a Canadian Educational Association report (1983) contains the most persuasive summation of why integration is

important, in a quote by Krishnamurti from Education and the Significance of Life:

> We may be highly educated, but if we are without deep integration of thought and feeling, our lives are incomplete, contradictory and torn with many fears; and as long as education does not cultivate an integrated outlook on life, it has very little significance.

Understanding Social Reality

A further example of how career education may enhance academic subject matter is in how it may enable students to understand social reality. One current practice in the high schools in this province, is the entrenchment of discipline specialization. Anthony (1974) warns of a danger inherent in discipline specialization: "it can eventually fragment, and thus diminish understanding of social reality. Social reality is experienced as a totality and not as a series of unrelated parts and events." (p.103)

The program developers are further persuaded that it is not "what is being taught in our schools as much as how it is being taught," that leads to compartmentalized and fragmented thinking. Several studies illustrate the viewpoint, that Canadian youth do not have a comprehensive understanding of social reality as it pertains to today's labor market. French, Stewart & Pickering, (1985) report that in spite of increased demands for further education and training, 55.2% of youth currently in the labor force do not

possess post-secondary education. Friesen (1981), in a longitudinal of Edmonton high school students found that plans for attending university had increased only one percentage point since 1969. An Ontario Teacher's Federation Report (1983) states that a survey of early school-leavers, showed that many work sporadically or never work. Phillips (1983) describes them as "a growing body of unemployed and unemployables." In spite of evidence that youth suffer most in times of high unemployment, 40% of Ontario youth and an unspecified, but significant number of Alberta youth, still leave school without having completed even a basic education.

Bibby and Posterski (1985) in a recent survey of 3,600 teenagers reported that 68% of participants indicated that they were bothered a "great" deal or a "good" deal by the question of "what will I do after high school". Yet, 70% of these same participants reported being optimistic about their ability to obtain a good job once they had completed their high school. Borgen and Amundson (1987) have outlined the need for research on the extent to which students leaving high school understand and anticipate the nature of the job market that they are about to enter. Such research could do much to enlighten educators about youth's perceptions of social realty and perhaps highlight some determinants of these perceptions. It could also give justification for a renewed emphasis on interdisciplinary approaches to education, particularly as these approaches include career education as one of the featured disciplines.

Sharing Mutually Inclusive Goals

In addition to the contentions that english language arts and career education are basic to children's education and have facility for enriching one another through integration, and may lead to increased understanding of social realty, a fourth contention directs the reader's attention to another commonality. This contention indicates that English language arts and career education have mutually inclusive goals and objectives. To demonstrate this, an approach described by Suhor (1980), is useful. He says:

> Certain goals of education and subject area instruction will be viewed as congruent; others as overlapping; still others as distinctive. With congruent goals, career education and the English language arts' goals match exactly. With overlapping goals, key areas are similar to other aspects of both career education goals and language arts goals containing some aspects that are not shared. Finally some language arts goals are distinctive, having no apparent career relevance except for the student who might become a language arts specialist (p. 24).

This approach was used by the program developers to substantiate the contention that the goals are mutually inclusive.

Listed below are the concepts currently prescribed by the Senior High Language Arts Curriculum Guide, 1982 for English 13, 23, 33. Following these is Table 1, which matches the concepts

with the career goals and objectives as listed by Davidson, 1980. These goals and objectives were modified for the unit, "The Road Ahead," and are intended outcomes for the unit of instruction.

Concepts for English 13, 23, 33

Writing

1. Appropriate pre-writing strategies can assist the writer in discovering and expressing meaning.
2. Appropriate organization and development of meaning are essential qualities of written composition.
3. Effective revision involves careful evaluation of ideas and a further shaping of the composition.
4. A writer's ideas and experiences can be presented through various modes of discourse.
5. The ability to write clearly, in a manner appropriate to the occasion is an appropriate life-skill.

Reading/Literature

6. Reading is a process which demands active involvement with the reader.
7. The study of literature can fulfill a variety of goals for the individual.
8. Enjoyment and appreciation of literature depend on favorable attitudes, extended range of reading materials, extended range of responses, and stimulation of the imagination.
9. Human experience and values can be explored through literature.

10. The understanding and appreciation of a literary selection is dependent upon the recognition and understanding of the general characteristics of literary forms and the relationship of form, idea and purpose.
11. Locating, selecting and evaluating written materials, frequently required to fulfill one's purpose in reading, are important life-skills.
12. An effective reader is able to select and use a variety of reading strategies appropriate to the purpose.

Viewing

13. An appreciation and understanding of a visual message requires an understanding of purpose.
14. Elements in and structure of the image strongly influence the total effect of the communication.
15. Many "visual communications" are really audio-visual messages which use sound and image together to communicate a message.
16. The viewer must evaluate the apparent reality created in media products.
17. Visual communication is similar in many ways to verbal forms of communication.

Listening

18. Listening is an active not a passive process.
19. Sensitivity to ideas, tone and purpose is an integral part of receiving a spoken communication.

20. Listening to obtain information involves attentive, open-minded reception of the message presented.
21. Critical listening involves an assessment of the validity of the message presented.

Speaking

22. The ability to speak easily, clearly, and effectively is an essential communication skill.
23. The ability to function in a group includes using talk to advance the purposes of the group and respecting group etiquette.
24. Communication situations call for appropriate language, tone and non-verbal behavior to suit the audience, occasion or purpose.

Insert Table 1 about here

Increasing in Importance in the Future

The foregoing discussion has substantiated both the basis for support of the integration of English language arts and career education by virtue of importance to children's education, increased relevance for both subjects, increasing youths' understanding of social reality and also as an efficient approach to instruction. The efficient approach to instruction results from teaching at one time, two disciplines with compatible goals objectives. The fourth contention toward which this literature review is directed is that both English language arts and career education goals and objectives demonstrate even greater compatibility with the educational goals

TABLE 1

Congruency (c) and Overlap (o) of Career Goals and Objectives with English 33 Concepts Outlined by 1982 Curriculum Guide

Career Goals and Objectives	Writing-Related Concepts					Reading-Related Concepts							Viewing-Related Concepts					Listening-Related Concepts				Speaking-Related Concepts		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Goal I: Developing Communication Skills Related to Careers																								
A. Experience a variety of themes relevant to life and careers through familiarity with literature.									c															
B. Use language in a variety of ways.				c																				c
C. Recognize importance of different types of written communication.					c																			
D. Investigate and interpret various media.											c					c	c							
Goal II: Increasing Self-Awareness: Clarifying Values, Interests																								
A. Examine and clarify philosophies and values related to life's work.		c				c					c							c	c	c	c	c		
B. Understand the personal significance of work and career.						o	o				o	o								c		c		c
C. Relate philosophy, values, aptitudes, interests, needs to occupations.	c	c	c		c	c					o													
D. Understand use of leisure and personal needs fulfillment.				o		o	o	o		o			o	o	o		o	o	o	o			o	o

TABLE 1 (cont'd)

Congruency (c) and Overlap (o) of Career Goals and Objectives with English 33 Concepts Outlined by 1982 Curriculum Guide

Career Goals and Objectives	Writing-Related Concepts					Reading-Related Concepts							Viewing-Related Concepts					Listening-Related Concepts				Speaking-Related Concepts		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Goal III: Recognizing the Variety and Complexity of World of Work																								
A. Understand how to access information on work, further education, careers.						c					c					c		o	o	o	o	c	o	c
B. Describe specifics of careers.		c	c	c	c																	c	o	o
C. Discern factors related to job availability.					o	c					c	c				o	o	o	o	o	o			
D. Develop techniques of job-search, job acquisition and maintenance.	c	c	c	c	c	c					c	c	o	o	o	o	o	c	c	c	c	c	c	c
Goal IV: Knowing How to Decide																								
A. Utilize decision-making model to make tentative career choice.	o				c	c					c							o	o	o	o	o		o
B. Plan to put choice into action.	o		o		c																	o		o

and objectives of the future. These educational objectives are outlined in the "Policy Statement on Secondary Education" (Alberta Education, 1985) which proposed that "Education should help students recognize, make and act on good choices." Particularly intended for senior high students are expectations to: 1) extend and refine skills for post-secondary institutions, 2) choose courses that lead to the fulfillment of personal aspirations; and 3) acquire specialized skills and positive attitudes required for direct entry into the work force. These expectations relate quite directly to career education. How to address these directions through a single career education course in high school as is presently being implemented is left up to the skillful career education coordinator in each school.

In an examination of the Alberta Career Development Model, French, Stewart and Pickering (1985) observe that additional components to enhance the basic approach to career education offered by the Life Careers curriculum, are needed. Infusion of career education concepts into content areas such as language arts is cited as one such component. Furthermore, the same authors suggest that the local needs of students, in terms of career education should be assessed by a career coordinator who may then enlist the help of others (collaborators) for delivering the required services. The potential for units such as the one this study has examined, is implicated in the complementary component to CALM.

Future trends depict the necessity for citizens to be flexible, adaptable, disposed to critical thinking and lifelong learning. the desirability of these qualities is increased when one examines the job trends for the future. The trends state that: 1) individuals should no longer expect to have one career in a lifetime. The possibility of five or six jobs is not unlikely; 2) as many as 20 per cent of the occupations available in the year 2000 haven't yet been identified; 3) many traditional jobs have disappeared. Most noticeable among these are the entry-level jobs requiring unskilled or semi-skilled workers; 4) nearly half the work force is women and of these 50% are married. The change in traditional roles for women is impinging upon systems of career equality Alberta Education, 1984). With these trends in mind, Alberta Education has developed a "Catalogue of Essential Concepts, Skills and Attitudes" which purports to address the needs of students of the future. Ten major categories are listed with "change" as an eleventh and separate category listed under "concepts" only. One concept of change suggests that individuals create the future by deciding what they want and then working to achieve it. That this future includes changing attitudes toward time and income, toward tradition and authority is affirmed by writers such as Toffler (1980) who fosters a wave-front analysis approach to determining the degree and direction of change. His approach emphasizes identifying change patterns as they emerge, so that individuals can influence them. The onus is then on education to produce students

who can think critically and creatively, make sound decisions and prepare themselves to influence the change patterns. Career education integrated with English language arts has the potential for producing such students.

Analysis of categories mentioned in the "Catalogue of Essential Concepts, Skills and Attitudes" shows a high agreement between the goals of both career education, and English language arts, and the concepts, skills and attitudes outlined. Table 2 lists the results of this analysis.

Insert Table 2 about here

RESEARCH PROVIDES EVIDENCE OF EFFICACY

The impact of research studies substantiating the fifth assumption made in the introduction can be judged by the reader. The fifth assumption states that the integration of career education into English language arts has proven to be a viable concept. To place the research into context, an overview of the career education movement in the United States is given below.

The concept of career education was formally introduced in the United States in 1971 by Sidney D. Marland, who was then commissioner of Education at the United States Office of Education and Kenneth B. Hoyt, then associate commissioner, and now, director of the Office of Career Education. Since that time much discussion, debate and many funding appropriations have led to

Table 2

Relationship of Goals of Career Education and Language Arts With Essential Concepts, Skills and Attitudes

Categories	English Language Arts		Career Education	
	Congruent	Overlapping	Congruent	Overlapping
1. Self-Concept/Life Style		x	x	
2. Interaction with Others	x		x	
3. Global/Environmental		x		x
4. Communal/Civic		x		x
5. Lifelong Learning; *Change	x		x	
6. Career/Work Exploration		x	x	
7. Critical/Creative Thinking	x		x	
8. Consumer/Producer		x		x
9. Communication	x		x	
10. Computation				x
Totals:	4	5	6	4

Note: Career education goals are congruent or overlapping with all 10 of the categories; English language arts goals are congruent or overlapping with 9 of the 10 categories.

numerous projects being undertaken. The two primary strategies for integrating career education concepts into the school curriculum being used in these projects are infusion and collaboration (Kilby, 1980). Through infusion, classroom teachers weave or "infuse" career education into regular academic curriculum such as language arts. Through collaboration educators, parents and members of the community, design learning materials and experiences to illustrate to students the close relationships between learning and career preparation.

One of the projects, called the Akron Career Development Program, undertook to increase students' self-awareness and self-esteem, knowledge of the world of work and skills in decision-making. The project focused on K to 10, but offered services to students in 11 and 12 as well. Equal numbers of randomly selected program and non-program students were tested. A comparison of test results showed that students within the career education program learned considerably more than non-program students in the areas measured by the tests. In most cases, cognitive differences were larger than affective differences; but in all grades, especially the tenth, program students showed evidence of more learning in both domains. In particular, results at the tenth grade level in the affective domain are notable because of their importance to student growth and also because the affective domain is recognized as being more difficult to measure than the cognitive domain. In light of this, the results of Akron's program are quite impressive

(p. 33).

Another study in Puma County, Tucson, Arizona in 1974-75 had an ultimate goal to help all K to 12 students grow in areas of self-awareness, educational awareness, career awareness, economic awareness, decision making, beginning competency, employability skills, appreciations and attitudes (p. 57). The assessment of student growth was done by post-test basis on control groups and experimental groups. Comparisons at all grade levels favored the high-exposure students; 19 of 20 comparisons favored the high exposure students at the .01 level of significance, with the remaining comparison favoring them at the .02 level of significance (p. 73). The inference is that career development may be facilitated through programs using infusion of Career Education goals and objectives into the content areas.

Many more projects are described in a book entitled, Career Education Programs That Work published by the Office of Career Education, Washington, D.C. The outcomes of these projects were impressive. That is not to say that some career education projects infused into content areas have not been unsuccessful. According to Hoyt (1981) evaluation studies have produced mixed results, but the general pattern of findings is far more positive than negative (p. 83). He goes on to say that "career education with its developmental infusion approach is the only existing approach with hard data attesting to its effectiveness" (p. 89).

Thus, the career development needs of students appear to be effectively met through infusion approaches of career educaiton into the content areas. The similarity of this method of career education delivery is comparable to that of integration of units of instruction, into the content area of English language arts, with one exception. That exception is the length of time that each method entails. This study addresses whether "integration" can prove to be equally as effective as the "infusion" approaches outlined by Hoyt, (1974) in facilitating career development in senior high students in the general program in Alberta.

PART II - THEORETICAL CONSIDERATIONS

A potentially effective career education program is based upon a thorough understanding of the basic tenets of career development theory (Bailey, 1975). From an educator's standpoint, a solid theoretical base provides the framework for the development of programs. Teachers must be oriented toward the notions of career development theory, in order that the practical applications of program implementation may be successful.

The purpose of the following section is to briefly summarize the theory of career development, Super's model of career development (1983) and his view of career maturity. A more extensive review of the literature pertaining to the five dimensions of career maturity as espoused by Super (1983) will follow.

THEORY OF CAREER DEVELOPMENT

A number of theorists support the view that career education ought to follow the dictates of a career development model (Ginsberg, 1951; Super, 1953; O'Hara & Tiedeman 1957; Katz 1963). These views stem from the idea that growth patterns for career follow stages similar to those of human development. (Piaget cited in Flavell, 1963; Sullivan, 1953; Havighurst 1953; Erickson, 1963) Such assumptions espouse stages of growth with notions of "critical" tasks at each stage. Thus, the implications that if passage to the next stage of development is desired, the "critical" tasks of the preceeding stage must be mastered. The assumption of the acquisition of particular competencies at each stage leads to three important inferences for career education: 1) an individual's physiology and experience must reach a particular level before particular competencies can be added to his repertoire (career maturity); 2) the environment must provide the opportunity perhaps even the stimulation and modelling for the task (facilitative environment); and 3) the more complex accomplishments are often combinations of simpler achievements (sequential presentation). While the school and the education system bear only part of the responsibility for an individual's career development, the school has become the coordinating body for career services. Thus, certain research that reflects on career development is important to educators.

Ginsberg, 1963 (cited in Healy, 1982) suggests that if environmental supports are not available within a certain period of time after maturation, the individual may never be able to achieve the particular competence. Stagnation or regression with respect to career development may occur. Tyler (1969) notes that while career development means focusing energy and refining assets, it also implies foreclosing some options. Educators, therefore, seek ways of developing programs to meet the development needs of students and also to preclude "irreversibility" as Ginsberg noted. The foreclosing of options as Tyler noted has particular consequence for many students such as early school - leavers and students selecting general programs. The educational system through career development programs may address these practical concerns.

SUPER'S MODEL OF CAREER DEVELOPMENT

By now, most educators are familiar with Super's five stages of career development and the approximate ages at which they occur. These are growth 0-14; exploration 14-24; establishment 24-44; maintenance 45-65; decline 65+. It is interesting to compare the career development model that Alberta has adopted, with the refinement of Super's career development model described above. The model adopted by Alberta is set up to reflect typical progression by grades. It shows that "exploration" as described by Super's model is the expected stage for the sample that this study addresses with one addition. Alberta model considers the stage to

be "exploration" and "preparation." In fact "exploration" is a dominant orientation from grades 7 to adult in this model. The career development model adopted by Alberta reflects more recent findings by researchers that support the recycling of stages throughout the life cycle. That is "exploration" may be experienced at any stage after growth and orientation. Such recent findings have led to changes to Super's original "matching model" which "matched people and jobs to ensure them success and satisfaction" (Super, 1963). Whereas, in his earlier model, subjective and objective data on abilities, interests and values were used to carry out the matching procedure, some new observations concerning the weaknesses of the matching model are given. Super (1983) points out that the matching model makes the following unwarranted assumptions: (a) that students or adults are sufficiently mature to have mature and stable traits, and (b) that they are able to use the self-knowledge provided by the assessment process in making career decisions. Super's more recent assessment model (1983) emphasizes the process of career decision-making within a developmental context. According to Super (1983) "readiness" is a predominant feature of his latest model. He places other components in a subjective role. He states:

> readiness for vocational and related career-decision making requires, 1) a sense of autonomy, time or future perspective, and self-esteem; 2) a commitment to work or to a self-actualizing career (work salience); 3) career maturity...and

then; 4) the search for a good match of developing interests, values and aptitudes with those characterizing a field of work and other life career roles.

CAREER MATURITY

There appears to be a growing recognition of the fact that career maturity is a "complex, multi-dimensional construct" (Super and Thompson, 1979, p. 6) which encompasses cognitive and affective components of career development." Research points to the existence of individual differences in career maturity and to its increase with age (Chodzinski, 1983; Herr & Enderlein, 1976; Jordaan & Heyde, 1979; Noeth & Prediger, 1978; Thompson et al., 1981).

According to Super (1963) career maturity may be thought of as having two definitions. The first definition is reflective of whether an individual is "acting his age" as far as career development is concerned. To use the example of the sample of students used in the study to explicate this definition, one would say that typically these students aged 17 to 19 would fall into the exploratory stage. If they do so, they are considered to have career maturity by Super's first definition. The second definition of career maturity examines how the individual is performing the developmental tasks of his/her stage, in comparison to his/her peers. Using the example of students in the sample, the Career Development Inventory (CDI) provides a scaled score showing the student's performance relative to his/her peers on five dimensions of

career maturity. These scores are considered measures that illustrate career maturity according to the second definition.

THE DIMENSIONS OF CAREER MATURITY

While the dimensions of Super's latest revision of his career development model, delineating the construct of career maturity, remain the same, some new elements have been included. These appear in the model as personal determinants or environmental determinants and reflect the multi-dimensional aspects of career maturity,.

Current research focuses on these determinants with respect to the measurement of career maturity. The writer uses the ensuing discussion to outline the five major dimensions as postulated by Super in the original model, and also to concentrate on current research that reflects the nature of the refinements to that model.

Planfulness

The first dimension, planfulness, is perceived by Super to be strongly linked to components of: autonomy, time perspective and self-esteem. Autonomy, the first component, is found in both adolescent and adult models since planning can only occur if individuals believe that they have some control over their lives. Often referred to as a locus of control, it has only recently been studied in relation to career development theory. A survey of the research by Muchinsky (1980) relates that individuals with internal locus of control are more likely than externals to score higher on various aspects of career maturity as measured by the Career Development Inventory.

Time perspective, the second component of planfulness, consists of reflection upon past experience and the anticipation of future experience. In this component, the now familiar processes of crystallizing, specifying and implementing are believed to have their origin. It may seem obvious to the reader that a time perspective is crucial for planning of any sort. Career planning, then also necessitates the "readiness" for or the "awareness" of the inevitability of choices related to work, career, or life's purpose. Super defines "awareness" as being of two types and both are crucial to his model of career maturity. The first definition of "awareness" as a term much used in career development, has a fundamental meaning of arousal or recognition of the need. It is this, according to Super that, career education has neglected in assuming that people are ready for "awareness" in its second and less appropriate meaning, knowledge and understanding.

"Awareness" and "readiness" are implicated in studies showing coping strategies related to sexual differences as they affect decisiveness and indecisiveness. Since decisiveness and indecisiveness may bear strongly upon a "readiness" to conceive of immediate, intermediate and distant future, the inclusion of these studies in the discussion of planfulness seems justified.

O'Hara and Beutall (1985) reported that males scored significantly higher on Self-Efficacy coping strategies than did females. Self-Efficacy is postively related to decisiveness. Females scored higher on Support-Seeking Behavior or Reactive

strategy. These behaviors were related negatively to decisiveness. Symptom Altering/Avoidant Behaviors were negatively related to decisiveness for both men and women. Anxiety has been found to be negatively related to decisiveness (Hawkins, Bradley and White, 1977, cited in Tolbert, 1980). A Canada Manpower study (1979) shows that having worries and feeling unprepared for deciding on the future are attitudes associated with low educational intentions. The inability to decide or the lack of "readiness" to plan may also reflect anxiety about the future, or the fear of failure.

Self-Esteem, the third component of planfulness, has been found in numerous studies to be essential to autonomy and to anticipating the future. Those who consider themselves of dubious worth are not likely to believe that they can control their careers by looking ahead and planning. A Canada Manpower study (1979) shows that a student's measured potential for further studies matters less for his/her intentions to continue his education if he/she feels relatively disadvantaged, rather than relatively favored. The effect of his/her actual ability is conditioned by the subjective evaluation of his/her chance of success. This finding implies that adolescents with low self-esteem may view their chance of success negatively, leading to failure to plan for further education or training. A further finding of this same study showed that the higher the rate of failure in the school, the lower the probability that students will plan to continue to post-secondary

school. This curtailment of post-secondary plans is not eliminated when controlling for mental ability, socio-economic background, language and programme of study and may indicate erosion of self-esteem in relation to one's chances of success promoted by being in a setting which results in a high rate of failure.

Visitation to a counsellor by a student was associated with a higher level of vocational planning, perhaps indicating that self-esteem increases planning in certain situations (Canada Manpower, 1979). Hall (cited in Healy, 1982) postulates that the higher the level of self-esteem, an individual has, the more extensive his/her search will be for information about available career roles and his/her present or potential competence in these areas. It appears that students high in self-esteem may more readily seek information and assistance from counsellors, contrary to what one might expect.

EXPLORATION

The second dimension of career maturity, exploration, consists of asking questions about oneself and one's situation. Questions need to be asked with respect to the self in terms of the life stage the individual is at, as well as the developmental tasks that accompany that life stage. Perspectives on the self need to be taken regarding various life-career roles such as those of student, worker, citizen and leasureite (Super, 1980). The individual's situation in terms of affiliations with institutions and organization is to be examined. Exploration also reflects attitudes toward resources that may be used, awareness of them, how

they are valued, and the individual's willingness to use them. It also includes participation and the use of these resources, those of family, school, workplace and community.

Career development research has indicated, students who have access to many of the antecedents of career maturity (relevant part-time jobs, extra-curricular activities and opportunities for systematic career exploration) are usually able to maintain effective progress in their career development. (Jordaan, Heyde, 1979; Super, 1984). When however, vocational, educational and social support is lacking or impaired, individuals may have to be more rational and logical to overcome obstacles and achieve appropriate career development tasks (Blustein, 1987). Noe and Steffy (1987) report that closeness to target job or career goal, in terms of status, can influence exploratory behavior. Having made a firm occupational or educational decision has been shown to decrease exploratory behavior in a college population. That is, freshman exhibited more planning and exploration than did sophomores who had settled upon their majors and were well into implementing their chosen educational goal. Research also related that an external orientation or locus of control may reduce motivation to demonstrate certain types of exploratory behavior. Blustein, (1987) suggests that it is advisable to assess potentially relevant attributes of a given population when examining systematic exploration and rational decision-making of that population.

INFORMATION

Information, the first cognitive factor in this model, includes knowledge of the world of work and the preferred occupation. As such, it requires broadly based information on the mores of work and the various options that the working world offers. It includes also information on various lifestages, their development tasks, their characteristics and their sequences. In the evaluation instrument used in this study, The Career Development Inventory, School Form, did not have a separate scale for information of the career development stages. The inclusion of knowledge of career development is included in the knowledge of the World of Work Scale on this version of the CDI.

Information is needed on ways of coping with developmental tasks. It is intended to be brought to bear on unpaid roles. Super (1983) perceives non-paid work outlets as a means of satisfying abilities, interests and values. The use of non-paid work outlets as a way of "becoming" is suggested, in a computer-controlled automated economy and in periods of widespread unemployment where self-actualization through the medium of work may not be a possibility.

Pitz and Harren (1979) sought to determine how information is used, rather than how much is known. Taleaferro and Fletcher (1970) noted that individuals claimed to use specific information, but later examination showed that the information was unrelated to judgements that were made.

Information - seeking behavior of individuals has been the subject of a number of studies. The use of taped or actual modelling of information-seeking behavior, was used experimentally to see how it would affect later information gathering behavior. Bergland, Quantro and Lindquist 1975 (cited in Healy, 1982) found that modelling used with reinforcement, that is, individuals being asked to return to the counsellor to discuss the information, proved effective toward increasing number and kinds of information seeking-behavior. Reardon and Burck 1976 (cited in Healy, 1982) also found that students exposed to modelling reinforcement procedures increased information-seeking behavior.

Selectivity of information has been shown to increase when greater amounts of information are provided (Payne, 1976) Katz et al., (1978), have reported that selectivity of information and personal interpretation of that information in a career development model is a function of its relevance to the individual's personal domain. Shank and Abelson's studies (1977) reinforce the idea that in understanding information, the relevance to personal domain is paramount. Their notion of schemata as organizing structure for knowledge based on personal relevance implications for personalizing instruction in school. This would assist the individual toward understanding and ultimately remembering the information. For students the most potent career information for understanding occupational information, appears to be obtained through the process of interviewing people in that occupation.

DECISION-MAKING

Decision-making, the second cognitive factor is another major dimension of career maturity. It comprises two aspects: 1) knowledge of decision making and 2) commitment to the principles of decision-making. Other factors to be considered in measuring this dimension are the ability to apply the principles - as well as the decision-making styles used in addressing developmental tasks.

Decision-making styles imply basic personality traits as determinants of career maturity rather than components of it. It isn't sufficient to know the principles of rational decision-making as Gelatt (1962) has described it. It is important to know how to apply them as well. Jespen (1974) identified twelve occupational decision-making strategies used by high school students. His research further discovered that students from similar backgrounds may use differing strategies. Additional research by Jepsen (1975) showed growth in information search strategy, and an expanding of basis for choice, as a development aspect of decision-making processes. Baumgardner (1976, 1977, 1977a cited in Tolbert, 1980) suggests that occupational choice is largely intuitive, particularly as one goes through college, and that the uncertainties of the world of work make logical planning and decision making ineffective. Healy (1982) reports that a survey of Harvard students reflected a primary decision-making strategy known as "muddling through." Tolbert (1980) describes that the challenge of career development counselling is to present the client's

strengths, goals and opportunities in a way that makes the best possible use of both intuitive and cognitive data in a systematic process.

Osipow (1983) investigated hypothesis-testing as a method of decision-making. Observations were made that there tended to be a "strong and robust" tendency to use biased strategies in testing vocational hypothesis. Confirmatory strategies were used to maintain cognitive consistency. Objective cognitive information frequently used for decision-making doesn't appear to alter biased hypothesis testing. Often the confirmatory strategies operate in the face of contradictory evidence (Osipow, 1983).

REALITY ORIENTATION

Reality orientation is the latest dimension mentioned by Super in his revised model. It is a combination of conative and cognitive factors. It is a multi-dimensional construct not easily measured by pencil and paper methods and was not an area of inquiry in this study.

CHAPTER III

DESIGN, IMPLEMENTATION AND EVALUATION PROCEDURES

Introduction:

In this chapter, the writer outlines four topics that are relevant to the unit of instruction used in this study. These are: 1) the design of the unit of instruction; 2) the implementation of the unit of instruction; 3) the evaluation of the unit of instruction, and 4) problems presented in the literature related to program evaluation.

Designing the Unit:

The design of the unit, employed a procedural model for interdisciplinary program building (Kirman and Nay, 1975). The steps involved are:

1) matching goals and objectives of the two disciplines
2) selecting a topic common to both
3) deciding on the method of integration

The rationale for the study in Chapter I, describes the option for developing an integrated unit of instruction provided by the Senior High Language Arts Curriculum Guide, 1982. The option is provided under the theme, "The Road Ahead" and relates to textual materials under the same theme. As the theme was deemed to be appropriate to both disciplines: English language arts and career education, it was adopted as the topic and title for the unit of instruction. Step two of the model was thereby effected.

Step one, involved the matching of goals and objectives for the two disciplines. As the reader may note, a procedure outlined in Part I of the literature review in the previous chapter was used to establish congruent and overlapping goals (Suhor, 1980). The goals and objectives used for career education were those recommended by Davidson et al. (1980). Concepts for English language arts were taken from the curriculum guide. These concepts are broad and fall into five categories related to processes of writing, reading, viewing, listening and speaking. Twenty-four concepts in all, are utilized.

Career Education goals selected were four in number:

I. Developing Communication Skills Related to Careers

II. Increasing Self-Awareness: Clarifying Values and Interests

III. Recognizing the Variety and Complexity of the World of Work

IV. Knowing How to Decide

Four objectives were listed under each of three of the goals with two being listed under goal number IV. Knowing How to Decide.

The third step of the model involved decisions about the method of integration. The program developers employed a focus upon the language arts philosophy and a recognition of the career development stage of the sample. The language arts philosophy promotes language arts as a life-long pursuit, emphasizes meaningful uses of language, encourages active student participation in all facets of language use and supports the use of language for facilitating personal development. This philosophy,

plus the recognition that our sample was in the exploration stage of career development, guided the integration methods. The language arts philosophy was intended to promote language use in meaningful ways, while the "exploration" aspect promoted verbal and non-verbal behavior in performing career development activities as outlined in Part II of Chapter III under "Dimensions of Career Maturity".

Research has shown that group counselling is equal to or more efficient than individual career counselling when there are large numbers of students involved (Davis & Horne, 1981). Career courses are similarly found to be effective. Furthermore, this writer had observed that students in the general program frequently did not avail themselves of career counseling offered by the counselling department on a student-initiated basis. Therefore, the adoption of broad program goals and the utilization of a series of activities that would maximize student interaction and participation, was designed to approximate a group vocational counselling process.

Once the philosophy for the delivery of the unit of instruction was determined, instructional guidelines were drafted which would guide the unit's implementation and evaluation. Three guidelines resulted: 1) the Unit Outline; 2) A suggested Sequence of Activities; and 3) A Behavioral Objectives Checklist

The Unit Outline was organized into three areas: goals and objectives, content and resources. The goals and objectives are

taken from Table 1, Chapter II, and represent goals and objectives of career education that are congruent and overlapping with concepts for English language arts. The content reflects the textual materials (themes) from the English 33 course, as well as applicable vocational psychology concepts gleaned from the writer's review of the literature. The resources list reflected English materials in addition to specific collections of material perceived by the counsellor and the English language arts teacher to be pertinent to the content, for facilitating the dimensions of career maturity as noted by Super (1963). These are: planning, exploration, knowledge of work and preferred occupations, and decision-making.

"The Suggested Sequence of Activities," was specifically designed to effect a rapprochement among goals and objectives, content and resources. It was intended to promote the philosophy of maximum student interaction and involvement and to allow for a varied approach in terms of the processes of reading, writing, speaking, viewing and listening. It was the basis for the implementation of the unit of instruction.

"The Behavioral Objectives Checklist" was intended to measure progress in areas deemed by Gronlund (1987) as critical to a balanced evaluation of outcomes. The balanced aspect refers to behavioral terms for the cognitive domain (Bloom, 1956); the affective domain (Krathwohl, 1964); and the psychomotor domain (Simpson, 1972). "The Behavioral Objectives Checklist" was

intended to allow for daily monitoring of student behaviors in the three domains, by the student, and/or peers and/or the instructor. Thus, it could provide daily "feedback" for the student about attainments with respect to growth "processes". The teacher and the student could more easily assess the mastery of simple competencies as they impinged upon the more complex competencies. The more complex competencies were reflected in the evaluated "products" that are described in the next section.

IMPLEMENTATION

The Unit Plan

The unit plan was intended to be facilitated through a careful blending of components of major goals and general objectives for student behaviours, the content and the resources from both disciplines as found in the "Unit Outline" (Appendix A). A "Suggested Sequence of Student Activities" was designed to allow for maximum integration of activities and unit plan components. Additions or deletions to the "Suggested Sequence of Student Activities" would alter time allotments for other activities, thus impairing the intentions of a balanced approach.

The discussion that follows reflects the intended procedures as outlined by the "Suggested Sequence of Student Activities". Three sets of activities were given: 1) Introductory 2) Developmental and 3) Concluding activities.

The Introduction Activities were intended to orient students to an awareness of the implications of career choices reflected by

Frost's poem, "The Road Not Taken." This was to stimulate thought and discussion about the effects of career choice. The outline of goals, objectives and evaluations was to be given to students, next. Following that an outline of the major project - a career booklet, which was to be evaluated for the English 33 component of the unit was to be handed out. In effecting the 1st major goal of Developing Communication Skills Related to Careers, collages, speeches, quotations and literary selections were recommended. The collages were to allow students an opportunity to reflect on their interests and values and to share these with others through visual and oral means. The speech on the topic of "In Ten Year's Time," necessitated a future time perspective and again was to be an opportunity for sharing aspirations for the future. An activity involving searching for quotations on work, was to allow students to acquaint themselves with past literary connections to the world of work. Similarly, the use of the English text Discovering was to enable students to read, discuss, and synthesize ideas relating to career and work. The Developmental Activities for the unit were then to focus on the remaining three goals: Increasing Self Awareness or Understanding Yourself, Recognizing the Variety and Complexity of Work and Knowing How to Decide.

The goal of Understanding Yourself or Increasing Self-awareness for the students was to have been fulfilled by students undertaking activities such as reading philosophical writings, reviewing their own past records. The students

individual records contained information from grade nine guidance classes where career interest inventories and tests from that time were to reveal their individual changes in interests and abilities, over time. Additional inventories were to be filled out with a view to balancing the student's perceptions of themselves by comparing different roles and various influences on their decision-making. A summary sheet to effect a weighing of current and past data for decision-making uses was to be provided.

In addressing the third major goal, of Recognizing the Variety and Complexity of work, students were to be guided through a media literacy activity designed to acquaint them with issues related to work, career trends and types of jobs being advertised. The media kit is part of an educational package on critical thinking provided by the Edmonton Journal. Concurrently, films and post-secondary presentations by counsellors representing further education possibilities and processes were to be integrated. These were planned with a view to helping students in collecting information for their personal use. The latter information was also perceived as assisting towards fulfilling requirements for the major assignment which was to be the preparation of the career booklet. Accessing information from a variety of sources was to be encouraged. The sources ranged from interviewing people in the occupation of choice to consulting with the counsellor and utilizing the computer program, "Career Factory". The writing of a career research report was an activity that was intended to promote

a synthesis of various sources of information. It was to be considered a major assignment in terms of evaluation for the unit in English 33. Further writing activities which involved letters, application forms and resumes, all related to career development and employment competencies, were also evaluated.

The fourth goal of Knowing How to Decide was to involve role playing. The role playing was intended to focus on knowledge of and practice with a seven-stage model for decision-making. Following that the individual was to write out a list of short-term goals and long-term goals for a personal career plan, which was also to be evaluated as an assignment.

Concluding Activities were to be those of ordering and placing all items for evaluation into a well-organized Career Booklet. The outline for the Career Booklet follows.

Complete, "Unit Outline" and "Sequence of Suggested Activities" as well as a "Behavioral Check List", are found in Appendix A.

OUTLINE FOR CAREER BOOKLET

1. Quotations on Work
2. Interest Surveys & Aptitude Tests
   - A. Destiny
   - B. Strong-Campbell
   - C. Self-Directed Search (from grade nine)
   - D. Differential Aptitude Test

E. Career Factory

1. Explore

2. Intersect

3. Describe

3. Self-Profile Summary Sheet

4. Career Trends

Summaries of 10 articles

5. Personal Interview

A. How to conduct an interview

B. Follow-up to an interview

6. Research paper on Occupational Choice

7. Letters:

A. Complaint or opinion

B. Inquiry

C. Covering Letter or Application Letter

D. Thank You Letter

8. Forms

A. Application for Job

B. Application for Post-Secondary

9. Resumes

A. Functional

B. Chronological

10. Plan for Goal Achievement

A. Short-term Plan

B. Long-term Plan

EVALUATION

The model for evaluation of the Unit of instruction is one advanced by Kenneke (1977). The three-step model emphasizes three questions to be asked by persons evaluating a career education program. These are:

1. Does the program fulfill an educational need?
2. Does the program demonstrate that it is effective?
3. Is it a transportable program?

The first question is relevant to this study as noted in the "Rationale for the Study", Chapter I. The "needs" survey conducted by the counselling department in the Harry Collinge High School had resulted in the following statistics: eighty percent of grade twelves wanted specific information about careers and occupations; seventy percent of grade twelves wanted to learn about their abilities, aptitudes and interests; sixty percent of grade twelves wanted to know how to get a summer job. These expressed student needs, plus the previously mentioned observation that grade twelve students in the general program were not frequenting the counselling office for career exploration activities, were considered adequate reasons for undertaking the design, implementation and evaluation of the unit of instruction.

In addressing the question in the model of whether the unit of instruction is effective, two considerations needed to be addressed. These are: 1) would a quantitative paradigm with a pre-test/post-test research design prove effectiveness? and 2)

what additional components would be needed to assess effectiveness of the unit of instruction?

The first question of whether a quantitative measure would, address the need for a valid appraisal of effectiveness was addressed after the unit of instruction was designed. The selection of the Career Development Inventory (CDI) appeared to be a valid and reliable measure of those areas of career development that the unit of instruction proposed to facilitate: Career Planning, Career Exploration, Knowledge of the World of Work, Decision-Making, and Knowledge of the Preferred Occupation. The second question of the additional components to balance the evaluation model was given post hoc consideration. In accordance with Stake's (1977) approach in the use of responsive data from participants, post hoc data to balance the evaluation model was collected and is outlined in Chapter VI.

The third question, addressed in the model regarding the transportable nature of the unit of instruction may be approached from a survey of the two guidelines as outlined previously: the "Unit Outline" and the "Suggested Sequence of Activities."

While this unit of instruction was directed toward the textual materials prescribed for English 33, any English Language Arts content might be equally well adapted to the unit's career goals and objectives. Such techniques were described by Norbert (1980) and Healy (1982) in Chapter II. Substitution of strategies would, in this writer's view, make the unit of instruction quite

transportable, since the content specifications and resources list provide both the direction and the sources of materials to implement the directions. The "Sequence of Suggested Activities," details specific activities and provides options which can be adapted for each teacher's instructional situation with respect to the delivery of career education.

PROBLEMS PRESENTED IN THE LITERATURE RELATED TO PROGRAM EVALUATION

General problems related to educational program evaluations are also inherent in Career Education program evaluations. These are: 1) difficulties in effecting maximum performance from students; and 2) measurement of "unexpected or unintended outcomes." The literature points to the fact that many students apply themselves more vigorously to measurement tasks that are accompanied by external reinforcement. In program evaluation, student's perceive, quite accurately perhaps, that no individual reinforcement for maximum performance is planned. Thus, program evaluation measures are subject to typical performance by individuals, which may reduce the expected performance of the program.

Further difficulty in program evaluation is that of allowing for unexpected outcomes. Mitchell (1979) advises that ways of evaluating these outcomes should be considered when designing a program. This appears to be almost a contradiction in terms. How to measure the "unexpected," frequently leads to post hoc

adjustments in evaluation procedures. Post hoc adjustments present time lags that lead to retrospective accounts of program affect. These are not the most reliable measures of program performance.

Adams (1977) lists five difficulties specific to career education program evaluations. These are: evolving definitions of career education, disparate philosophies of career education, illusive criteria, difficulty of measuring affective outcomes and differing theories of how career development takes place. Because career education is relatively new to Alberta, many of these difficulties are just now being addressed.

The differing theories of how career development takes place is reflected in the nature of the instruments developed to measure program effects. That the research cited is specific to the instruments used and the underlying theory governing its use, requires circumspection in choice of evaluation instruments. Mitchell (1979) suggests that standardized instruments are inappropriate for measuring short-term changes in student performance, which is a pertinent point in career education evaluation. He deems norms for measures of the outcome of specific educational product as similarly inappropriate. Mitchell's (1979) proposed alternative to the use of standardized instruments is for evaluators to design their own instruments. The dilemma for the educator is whether to measure with a reliable, objective instrument with less than perfect content validity, or to perform the time-consuming task of developing one's own instrument. The

latter doesn't allow for timely evaluations of current career education practices. To compound these difficulties, the evaluator must consider the prospect of employing a wealth of descriptive data to supplement the quantitative approach (Bryk, 1978). The enormity of the task, would appear to dissuade many educators from evaluating their own small-scale innovations.

The Career Development Inventory (CDI) as used in this study presents the usual limitations of a standardized instrument as outlined by Mitchell (1979).

Furthermore, its employment as an instrument for evaluation of Career Education program with senior high students in the U.S. suggests that it is most likely to reflect significant increases in the conative scales rather than in the cognitive scales when using the research design employed by this study and which is discussed more fully in Chapter IV.

CHAPTER IV

RESEARCH METHOD

Introduction

In this chapter, the writer addresses five major areas of the research method. These are: 1) a discussion of the sample; 2) a description of the research method; 3) an outline of the analysis procedure; 4) a review of the technical aspects of the Career Development Inventory (CDI); and 5) a delineation of the research questions addressed.

The Sample

The unit of instruction was directed toward the content and skills of the English 33 Language Arts curriculum. The sample consisted of all students enrolled in English 33, in two high schools in the Yellowhead School Division in the second semester in the 1986-87 school term. The students enrolled in the high school in Hinton received the unit of instruction and were designated as the experimental group. Those students from the high school in Evansburg were designated the control group. The original sample size was 46 students. Through attrition, the sample size dropped to 40 students; 23 in the experimental group and 17 in the control group. Both males and females ranging in age from 16 to 19 were included in the sample. The majority of the sample were in grade twelve; however, seven grade elevens were in the experimental group.

The Method

Prior to implementation of the study, permission for the study had been sought and granted. This permission came from the central office administrator of the school division and the administrators of the two schools involved. Students were informed of the nature of the study and of their right to withdraw from the study should they so choose.

The experimental design utilized a pre-test/post-test format using the CDI with an experimental group and a control group. The test was administered by the writer. The Language Arts teacher who helped design the unit, refrained from observing the test administration, or from becoming acquainted with its contents in order to avoid "teaching to the test."

The first administration of the CDI took place during the second week of February, 1987 and was followed 10 weeks later by the final administration during the third week in April, 1987.

Standard procedures for administration were followed as directed in Volume 1: User's Manual of the CDI. The test/re-test procedure was carried out during the eighty minutes of the regularly scheduled English 33 classes.

After the administration of the pre-test, instruction for the experimental group followed using "The Unit Outline" and the "Suggested Sequence of Activities" as described in Chapter III. Unforeseen circumstances changed the number and sequences of the activities as originally outlined. One circumstance was that

students in the experimental group had not been administered the Differential Aptitude Test (DAT), in grade nine as this writer had anticipated. This test provides details on student aptitudes which were considered relevant student information for understanding themselves and crucial to performing the matching of personal attributes to career possibilities. The decision to take instructional time to administer and discuss the results of the (DAT) necessarily reduced the allotted time of thirty hours, somewhat. A further unforeseen circumstance became obvious as the unit instruction progressed. This was that students who had taken English 23 prior to February, 1987, with a particular teacher as instructor, had experienced some elements of career planning. This circumstance complicated the broad approach taken through the unit's goals and objectives. Some individualized strategies needed to be addressed to accommodate students with varying exposure to career education and/or varying amounts of career counselling.

After the answer sheets resulting from both administrations of the CDI were collected, the sheets were sent to the test publishers for scoring. The data were then examined for significance with respect to maturation, treatment effect and possible areas of strength and weaknesses in program design and delivery.

Analysis

The analysis of results proceeded from data generated through the use of a computer program entitled, "Two-Way Analysis of Variance with Repeated Measures on One Factor." The program

performs a two-way analysis of variance, with one of the factors as repeated measures. Post hoc Scheffe comparisons are made between main effects for each factor. A plot of treatment means is also provided which assists in interpretation of results. This program is supplied through the Division of Educational Research Services, Faculty of Education, University of Alberta.

The input data consisted of number codes for each subject, designations for sex and pre and post test scores obtained from the CDI scales of: Career Planning, Career Exploration, Decision-Making, World of Work and Knowledge of Preferred Occupation. Input data was supplied for both experimental and control groups.

The analysis of results began with descriptive statistics, which was organized in four different ways to reflect four different types of information. These organizations allowed for information gathering with respect to: 1) changes for each group from pre-test to post-test, as well as changes between groups from pre-test to post-test; 2) each group's performance relative to the norming sample of the CDI; 3) changes reflecting shifts in responses from non-specific to specific and; 4) changes reflecting shifts on particular items in the Career Planning and Career Exploration scales, only. The latter allowed for closer scrutiny in terms of program strengths and weaknesses. These data are shown in Tables 3-7 in Chapter V. This was followed by the two-way analysis of variance, with group and pre-test/post-test results being the factors analyzed. The two-way analysis of variance was

done for each of the five sub-tests measuring the five scales on the CDI: Career Planning, Career Exploration, Decision-Making, Knowledge of the World of Work and of the Preferred Occupation. These results are shown in Tables 9-12 in Chapter V.

CAREER DEVELOPMENT INVENTORY

The current standardized School Form of the Career Development Inventory (CDI) developed by Drs. Super, Thompson, Lindeman, Jordan and Myers was copyrighted in 1979. It was used in this study and contains a total of 120 items. It requires a total administration time of 60 minutes on the average. Test information suggests that the CDI is intended for grades 8 to 12, with one scale: Knowledge of Preferred Occupation as being appropriate only for grades 10-12.

The CDI yields scores for five dimensions of career maturity as noted in Chapter III. These dimensions are measured by the scales of: Career Planning (CP) = 20 items; Career Exploration (CE) = 20 items; Decision-Making (DM) = 20 items; World of Work (WW) = 20 items and Knowledge of Preferred Occupation (PO) = 40 items.

Two factors emerge in this inventory. The first, a conative factor is represented by the scales of CP and CE. The second, a cognitive factor, is represented by three scales of DM, WW and PO.

The School Form can be used to help students make educational and career plans and may contribute to program and service evaluation, as is the case in this study.

The Norms

The norms for the CDI were based on samples of 5,039 students in grades 9 through 12. The test publishers report that it was not a representative national sample. Eastern schools and middle-class Caucasians were heavily represented. The total grade twelve norming sample as pertinent to this study averaged 318 students. Separate norming samples were used for each of the five scales as follows:

CP = 328; CE = 294; DM = 326; WW = 320 and PO = 301.

Reliability

Reliability estimates reported in Volume I: User's Manual (1981) and the Volume II: Technical Manual (1984) of the CDI are those of internal consistency, test-retest correlations, and standard errors of measurement.

Internal Consistency

Internal consistency is reported by Cronbach alpha coefficients for the five scales. In all cases the estimates are given by sex within grade levels. CP, CE, and WW have median reliability estimates of .89, .78, and .84 respectively. DM and PO have median reliability estimates of .67 and .60. These values are considered low for judgement about individual students, although they are considered adequate for analyzing group differences. Median values in DM are lower for some sub-groups, e.g. females vs. males (.59 vs. .70). A similar result is apparent for P.O. where the values are lower for grades 9's and 10's than for 11's and 12's

(.55 vs. .66). Eleven and twelfth graders are expected to be firmer in .pa their decisions about preferred occupational group than are 9th or 10th graders; therefore, the higher reliability estimates for older students is anticipated.

Test-Retest Correlations

In Autumn, 1981, the five separate CDI scales were administered twice within a three week interval to a total of 66 grade twelves in school L, a largely rural county southeast of Washington D.C. The test-retest correlations for grade 12 are found to be C.P. = .79, CE = .73, DM = .74, WW = .78 and PO = .44. The test information given by the publishers is that relatively small standard deviations on scales DM, WW and PO particularly on Test 1, probably account for the reduced correlations on some of these scales.

The test-retest stability suggested by the User's Manual is that the scores range between .63 to .71 for grades 9 to 12, over periods of up to six months. This information is based on previous forms of the CDI and may not be specific to the School Form used in this study.

Standard Error of Measurement

The standard error of measurement (SEM) scores reflect greater values for DM and PO as noted in the reliability estimates. They range from a low of 6.5 on the CP scale for grade 9 to a high of 13.3 for PO for grade 10. Grade twelve SEM's range from 6.7 to 13.0. The largest SEM is shown for the scale of Decision-Making.

Validity

Validity considerations, as cited in the User's Manual which accompanies the Career Development Inventory (1981) relate to content, construct and criterion validity.

Content Validity

The content validity was established by consensus of experts that the items contained in the five scales were the ones postulated by Super's model of Career maturity (1957) and refined by the Career Pattern Study (1968-1974). Super's model postulated five basic dimensions: planfulness, exploration, decision-making, information (now broken down into two types) and reality orientation. The reality orientation dimensions is multi-dimensional and requires a number of independent measures. It is, therefore, not included as a measure on the CDI. The other four dimensions are judged by experts to be present in the five scales of the CDI.

Construct Validity

The construct validity of the CDI is based on the expectation that the traits, termed developmental, are expected to increase with age. Evidence for construct validity is based on sub-group differences (sex, grade and program) and on the factor structure of the instrument. Career maturity gains are expected as students go from 9th to 12th grade. Tables in the manual verify that increases occur for all separate and combined scales. Career Planning shows the greatest increase from 96.0 in grade 9 to 107.4 in grade 12,

while Knowledge of Preferred Occupation shows the smallest increase. Factor analysis of the fine separate CDI scales by sex and grade, shows evidence for a two-factor structure consisting of conative and cognitive domains. The loadings range from .62 to .89 and indicate that the two factor structure clearly exists and further supports the construct validity of the CDI.

Sex differences in terms of the CDI appear minimal due perhaps to a deliberate attempt to use unisex terms on CDI items. The information given in the Technical Manual states that minimal sex differences would be found. In grade 11 and 12 some differences are noted, in that females tend to make higher DM and WW scores. As these are cognitive scales, the higher performance by females is consistent with similar female performance found in academic achievement measures. The cognitive CDI scales are more highly correlated with academic achievement measure than are the conative scales. The infrequent and moderate sex differences are taken to be further evidence of the construct validity of the CDI.

Various programs were examined for differences indicating construct validity of the CDI. Students in the norming groups indicated that they were enrolled in one of five programs: General, College Preparatory, Vocational/Technical, Business or Honors. Although career development theory doesn't predict specific differences among programs, clearly such differences should occur. For example, students in honors programs would be expected to have higher means especially on the cognitive scales.

Information in the User's Manual support this distinction and noted that students in general and vocational programs tended to have lower scores than those in college preparatory and business programs, particularly on the cognitive scales. Further evidence of the construct validity is cited by the publishers as being shown by program differences.

Criterion Validity

No data is given on criterion-related validity, other than to suggest that authors of newly published tests are rarely able to report predictive validity especially for measures of career maturity (Buros, 1986).

Major Difficulties With the Use of the CDI

The utility of this inventory is hampered by the use of pre-paid answer sheets which entails a substantial cost for machine scoring. As well, the lack of scoring information makes the analysis of subtests measuring the scales of D.M., W.W. and P.O. prohibitive. Thus, valuable information for the determination of program strengths and weaknesses for the purpose of refinements is lost. These factors present serious limitations to the use of the CDI for the ordinary educator.

Research Questions

This study emphasized three research questions as stated below:

1. What is the potential role for a cooperatively designed unit of instruction integrating Career Education and English

Language Arts toward accelerating career maturity in senior high students in a general program?

2. Will there be a treatment effect, measured by a significant increase in scores from pre-test to post-test on the Career Development Inventory, resulting in a difference between the experimental group and the control group?
3. Will career maturity increase significantly, as measured by an increase in scores from pre-test to post-test on the Career Development Inventory, for all individuals regardless of group assignment?

CHAPTER V

RESULTS OF THE QUANTITATIVE DATA

Introduction

In this chapter, both descriptive and inferential statistics based on scores from two groups are examined by the writer. These scores are derived from pre-test and post-test measurements of the experimental and the control group using the Career Development Inventory (CDI).

Descriptive statistics are given in Tables 3 to 7 and reflect four different methods of organization of data from subtests measured by the five scales of the CDI. These five scales are career planning, career exploration, decision-making, knowledge of the world of work and preferred occupation.

Inferential statistics given in Tables 8 to 12 are obtained from a two-way analysis of variance imposed upon each set of scores which pertain to the subtests measuring each of the five scales as noted above. The two-way analysis of variance was employed using Factor A for group scores: experimental versus control, and Factor B, for time: pre-test versus post-test.

Descriptive Statistics:

Means and Standard Deviations

Table 3, reports data that comprises pre-test and post-test means and standard deviations for the experimental and control groups. Overall, the experimental group is seen to have lower mean scores than the control group in four of the five subtests at pre-

test measurement. The lower mean scores are in the scales of career planning, decision-making, knowledge of the world of work and knowledge of the preferred occupation. Only the subtest measuring career exploration showed a higher mean score. At post-test measurement, the experimental group's mean scores had surpassed the control group's mean scores on three of the five subtests. Two of these subtests measure the conative domain as reflected in the scales of career planning, and career exploration. The third subtest measures the cognitive domain as represented by the scale, knowledge of the preferred occupation.

An examination of the experimental group's results only, from pre-test to post-test show gains in mean scores in each of the five subtests. A similar examination of the control group's results only, shows gains in three subtests in career exploration, decision-making and knoweldge of the world of work. Losses are recorded in subtests measuring career planning and knowledge of preferred occupation from pre-test post-test. Thus, one subtest measuring the conative domain of the control group shows a loss, as well as one subtest, measuring the cognitive domain.

Insert Table 3 about here

COMPARISON OF MEANS

Table 4, presents data that compares the experimental and control group means to those of the norming sample of the CDI, in

TABLE 3

MEANS AND STANDARD DEVIATIONS
BY GROUP
FOR PRE-TEST AND POST-TEST ON THE CDI

Group	Experimental Group n=23				Control n=17			
of the CDI	Pre-test	S.D.	Post-test	S.D.	Pre-test	S.D.	Post-test	S.D.
CAREER PLANNING	100.91	26.29	114.08	18.65	104.23	20.62	103.58	20.51
CAREER EXPLORATION	107.17	24.57	116.60	20.09	92.70	17.27	100.00	19.66
DECISION-MAKING	84.86	21.97	92.52	15.50	95.47	18.59	100.82	18.42
WORLD OF WORK	87.86	15.91	96.13	14.95	95.47	17.65	100.17	14.44
KNOWLEDGE OF PREFERRED OCCUPATION	98.26	17.11	103.91	14.54	104.41	12.45	99.94	14.44

each of the five scales. The experimental group maintains three mean scores above the averages shown for the norming sample, whereas the control group records one mean score higher than that of the normative mean. The reader will observe the higher scores for the experimental group are in the subtests measuring career planning, career exploration and knowledge of the preferred occupation. Similarly, it can be seen that the control group records a higher mean score than that of the normative group in knowledge of the preferred occupation. The two mean scores of the experimental group that fall below those of the norming sample's mean scores are considerably lower. They are in the decision-making and world of work subtests. These scales reflect cognitive dimensions. The comparison shows a pattern of more extreme scores for the experimental group, whereas the control group's scores cluster closer to the normative mean.

Insert Table 4 about here

RESPONSE PATTERNS SHOWING NET SHIFTS

Table 5, represents a post-hoc survey of the net shifts of individuals in each group, in each scale from pre-test to post-test. As such the calculation of net shift per individual for each subtest is accumulated into percentages of individuals showing losses, gains or no change within each group. The average numerical change in scores is also recorded for each group, for each subtest scale. The most appreciative percentage gains were

TABLE 4

COMPARISON OF AVERAGE MEANS OF GROUPS AT POST-TEST
with MEANS OF NORMATIVE GROUP (C.D.I.)
ON FIVE SCALES OF CAREER MATURITY

GROUP	CAREER PLANNING	CAREER EXPLORATION	DECISION-MAKING	WORLD OF WORK	KNOWLEDGE OF PREFERRED OCCUPATION
Normative N= 3/8	107.40	104.40	101.70	100.9	100.8
Experimental N=23	107.49	111.89	88.68	91.99	101.08
Control N=17	103.91	96.35	98.14	97.82	102.17

made by the experimental group in the conative dimension represented by the scales of career planning and career exploration. The cognitive dimension reflected in the scales of knowledge of preferred occupation, decision-making and knowledge of the world of work showed a lower percentage of individuals making gains. The lowest percentage of gains by this group was in the scale reflecting knowledge of the world of work. This scale also reported the largest percentage of individuals in the experimental group which showed no change from pre-test to post-test. Conversely, the control group exhibited the largest gains in two scales of the cognitive dimension and their smallest gains in the two scales of the conative dimension. The scale, knowledge of the preferred occupation, the reader will observe, represents the scale with the single smallest gain for the control group. This scale also showed a small percentage of individuals, in the control group as having made no change from pre-test to post-test. Calculations for this table are found in Appendix B.

Insert Table 5 about here

RESPONSE TO UNIT FACILITATORS

Tables 6 and 7 contain post-hoc information on career planning and career exploration respectively with respect to each group's response patterns on selected items as they reflect movement from responses indicating non-specificity to responses indicating

TABLE 5

PERCENTAGES
INDIVIDUAL NET SHIFTS PER GROUP
AT POST TEST
Scales

Group	Conative Dimension		Cognitive Dimension		
	Career Planning	Career Exploration	Decision-Making	World of Work	Preferred Occupation
EXPERIMENTAL	-13%	-26%	-30%	-26%	-34%
N=23	+86%	+74%	65%	+57%	+66%
			5% no chg.	17% no chg.	
AVERAGE SCORE CHANGE	+13.17	+13.04	+ 4.13	+ 7.34	+ 7.8
CONTROL	-59%	-59%	-35%	-35%	-65%
N=17	+41%	+41%	+65%	+65%	+29%
					6% no. chge.
AVERAGE SCORE CHANGE =	- 1.2	+ 5.6	+ 3.29	+ 5.23	- 4.47

specificity. An example may serve to illustrate how the data in the table was derived. Examination of item one of the career planning scale (Table 6) will help the reader to note that it deals with information gathering by using the library, writing or oral communication. Response possibilities in the inventory were given as follows:

A = I have given no thought to this

B = I have given some thought to this, but I have made no plans

C = I have some plans, but am still not sure of them.

D = I have made definite plans, but don't know yet how to carry them out.

E = I have made definite plans, and know what to do to carry them out.

Responses D & E were considered more specific than A,B or C. Each individual's responses for each group on each item in the subtest were tallied to give a group specificity score at pre-test. Specificity scores for each group were calculated for the post-test in the same manner. The reader will observe that a net shift is shown for each group, which reflects the difference between pre-test and post-test scores. The net shift for the experimental group on item one is .+5, for the control group the net shift is -18. Next, a cumulative shift score was calculated as being 23% in favor of the experimental group. Using the criterion of 20%, in favor of the experimental control group, the writer then selected this item and others for further examination, as noted in the

discussion below.

Career exploration data in Table 7, is similarily derived. Response possibilities differ slightly from the ones outlined for the career planning subtest as only four response possibilities are given instead of five possibilities as outlined in the example.

Tables 6 & 7 show selected items which have met the criterion outlined above and are linked to goals objectives and activities in the unit of instruction, perceived by the writer to have been facilitators toward the experimental group's shift from non-specific to specific responses. Evaluated activities in both tables are highlighted for reasons explained in the subsequent discussion.

Table 6 lists seven items representing career planning endeavors that direct an individual's attention toward crystallizing and specifying a particular career or occupational group. Two divisions are given as "what have you done so far," and "what amount of knowledge, do you have." Planning specificity, for the first division involves three items. These three items: information-gathering, involvement in extra-curricular activities, and deliberate behaviors to increase the likelihood of becoming a good worker, yield two levels. The first level, indicates definite plans, but not the knowledge to carry these out, whereas level two, specifies greater certainty. The latter, presumes definite plans and the knowledge to carry out these plans.

When addressing, the second division of the scale or the

amount of knowledge now possessed by the individual, responses of a "good deal" or a "great deal" yield the specificity score shown on the table. Four items: working conditions, need for people in the occupation, entry methods, and advancement opportunities in the preferred occupation are given as specific. Elements considered by the writer as facilitators toward the directional shift of responses on items as noted above, are found in unit goals, behavioral objectives, content objectives, and activities of two types--"process" activities and activities leading to "products" that are evaluated activities. The term "evaluated activities" in the table 4 refers to "products" that form part of a career booklet that is assessed for course marks in English 33. These evaluated activities proceed from the sequential attention to unit facilitators or process acivities. In Table 6, the career planning activities evaluated for marks, are shown as the collection and summary of newspaper clippings reflecting economic and occupational trends and the preparation of a career research report.

Insert Table 6 & 7 about here

In Table 7, the career exploration scale shows that six items met specificity criterion. The two divisions of "who would you go to" and "how much useful information is obtained," shows three items each. The three items in the first division yielding specific responses of "probably" or "definitely" are: utilizing adults who know something and can help others, utilizing people in

TABLE 6
Response Analysis Showing Shifts from
Non-Specific to Specific
(With perceived unit facilitators)

CAREER PLANNING

Item Description	GROUP						UNIT FACILITATORS
What have you done so far?	EXPERIMENTAL N=23			CONTROL N=17			GOALS, OBJECTIVES, ACTIVITIES
1. Information gathering using library, letters, oral communication.	Pre-test 47	Post-test 52	Net Shift + 5	Pre-test 48	Post-test 30	Net Shift -18	Goal 1. Developing communication skills related to Careers.
5. Involvement in school or out of school activities related to career planning.	43	65	+22	42	12	-30	D. Investigates and interprets various media.
12. Doing things that will help me be a good worker.	47	87	+43	53	47	- 6	Goal III. Recognizing the variety and complexity of work. A. Learns how to access information on work, further education and careers.
What amount of knowledge do you have?							B. Describes specific topics related to a job or career choice.
15. The working condition on jobs in my preferred occupation.	56	69	+14	78	71	- 7	Process Activities Interviewing workers. Researching a career. Researching trends using a newspaper (Edmonton Journal Kit on Critical-Thinking).
17. Need for people in my preferred occupation.	39	61	+22	69	47	-22	
18. Entry methods for people in my preferred occupation.	39	61	+22	42	36	- 6	EVALUATED ACTIVITIES Collection and summary of newspaper clippings
19. Advancement opportunities in my preferred occupation.	30	70	+40	54	53	- 1	Career research report (see Unit Outline - Appendix B)

Key: Specific Responses = "D" I have made definite plans, but don't know yet how to carry them out.
"E" I made definite plans, and know how to carry them out.

Items 15-19: "D" - a good deal
"E" - a great deal

TABLE 7

Response Analysis Showing Shifts From
Non-Specific To Specific
(with perceived unit facilitators)

CAREER EXPLORATION

Item Description	GROUP					
Would you go to	EXPERIMENTAL N=23			CONTROL N=17		
	Pre-	Post-	Net	Pre-	Post-	Net
27. Other adults who know something and can help others.	82	96	+14	78	65	-13
29. People in the occupation or at the institute I am considering.	82	100	+18	71	70	- 1
30. T.V. shows, movies and magazines.	25	56		=31	53	41
How much useful info. is obtained						
36. Counsellors	56	73	+27	48	53	+ 5
37. Other adults who know things and can help others.	57	78	+21	42	24	-18
38. College catalogues, books, guidance materials.	52	73	+21	48	48	0

Key: Items 27-30 Specific Response = "C" Probably
"D" Definitely
Items 36-38 Specific Response = "C" A good deal
"D" A great deal

UNIT FACILITATORS GOALS
OBJECTIVES AND ACTIVITIES

Goal III. Recognizing the Variety and complexity of Work.

A. Learns how to access information on work, further education and careers.

Content Objectives: Knowledge and skill are necessary in locating and interpreting information from many sources such as:

a) films
b) videos
c) speakers and individuals
d) post-secondary calendars
e) technical books
f) journals
g) newspapers
h) telephone directions
i) career monographs
j) C.C.D.O.
k) Career Factory
(computer program)

Process Activities:
Interviewing workers,
writing letters, essays,
viewing films, listening to speakers.

EVALUATED ACTIVITIES
Application forms, letters,
resumes, essays, Interview reports
Career Research Report

the occupation or at the institute that one intends to enroll in, and utilizing T.V. shows, movies and magazines. The three items in the second division yielding specific responses of "a good deal" or "a great deal" as sources of information are: counsellors, other adults who know things and college catalogues, books and guidance materials. Attention in the table, is again drawn toward unit facilitators for these items as they impinge upon evaluated activities. The evaluated activities were: completed application forms, letters, resumes, essays, interview reports and a career research report. These evaluations contributed toward the course mark in English 33. Complete data on responses to unit facilitators appear in Appendix B.

INFERENTIAL STATISTICS:

ANOVA FOR CAREER PLANNING

As shown in Table 8, the two-way analysis of variance for career planning displays a non-significant result for Factor A, group, giving no support for research question two, which requires evidence for a treatment effect on the experimental group. Such an effect would be confirmed if a significant difference had occurred between experimental group and the control group from pre-test to post-test. Significance for Factor B, pre-post, indicates support for research question two in career planning. Research question three requires evidence to determine whether changes for both groups in average means occur over time. A significant interaction is noted. This interaction reflects a change in relative positions for the experimental and control groups with respect to mean scores from pre-test to post-test. At pre-test, the control group held the higher mean score, but declined to a lower mean score at post-test. The experimental group showed a reverse trend. It's score rose from a lower mean score at a pre-test to a higher mean score at post-test. This results in the interaction.

Insert Table 8 about here

ANOVA FOR CAREER EXPLORATION

A two-way analysis of variance for career exploration was used to test the difference in means to find evidence for research

TABLE 8

Two-way Analysis of Variance
for Career Planning

Source	Sum of Squares	D.F.	Mean Squares	F Ratio	Prob
Between Subjects	0.3175E+05	39	251.401	0.303	0.585
A	0.2514E+03	1			
Subjects Wthn Group	0.3150E+05	38	828.982		
Within Subjects	0.6903E+04	40			
B	0.7670E+03	1	767.031	5.944	0.020*
AB	0.9338E+03	1	933.817	7.236	0.011*
B X SUBJ Wthn Group	0.490E+04	38	129.043		

*$p \leq .05$

questions two and three. The results for this scale shown in Table 9, report a significant difference for Factor A, group, thus giving support for a treatment effect as outlined in research question two. This question seeks statistical evidence of differences in pre-test and post-test mean scores between experimental group and control group. A further significant difference is noted for Factor B, pre-post, justifiying support for research question three. Support for research question three implies an increase in career maturity marked by increased scores from pre-test to post-test by both experimental and control groups.

Insert Table 9 about here

ANOVA FOR DECISION MAKING

The results of the two-way analysis of variance for decision-making are shown in Table 10. An indication of non-significance is recorded for Factor A, group, and for interaction between treatment and time. This leads to assumptions of non-support for research question two. Research question two requires evidence for treatment effect through differences in average means between the experimental and the control group. Factor B, pre-post, shows significance and lends support for research question three. This question investigates the evidence regarding changes in average means for each group from pre-test to post-test. Such evidence would merit the assumption of career maturity increasing over time.

TABLE 9

Two-Way Analsis of Variance
for Career Exploration

Source of Variation	Sum of Squares	D.F.	Mean Squares	F Ratio	Prob
Between Subjects	0.2788E+05	39			
A	0.4721E+04	1	4721.016	7.746	0.008*
Subjects Wthn Group	0.2316E+05	38	609.474		
Wthn Subjects	0.1145E+05	40			
B	0.1368E+04	1	1368.194	5.215	0.028*
AB	0.2199E+02	1	21.994	0.084	0.774
B X SUBJ Wthn Group	0.997CE+04	38	262.378		

*$p \leq .05$

Insert Table 10 about here

ANOVA FOR WORLD OF WORK

The results of the two way analysis of variance fo the world of work can be seen in Table 11. The data does not confirm a positive effect for research question two, as no significant difference is found for Factor A, group. This leads to no support being given to treatment effect shown by greater gains for the experimental group over the control group from pre-test to post-test. Significance for Factor B pre-post, is reported and relates positively to research question three. The research question seeks evidence of increases in scores over time between pre-test and post-test for the experimental and control groups. Evidence for the increase of scores over time implies an increase in career maturity over time. Data to support interaction are not found for this scale.

Insert Table 11 about here

ANOVA FOR KNOWLEDGE OF THE PREFERRED OCCUPATION

A two-way analysis of variance for knowledge of the preferred occupation was used to test the differences in means between the experimental and control group from pre-test to post-test. The scores for the subtest that measures this scale are given in Table 12. In this table, no significance is shown for Factor A,

TABLE 10

Two-Way Analysis of Variance
For Decision-Making

Source of Variation	Sum of Squares	D.F.	Mean Squares	F Ratio	Prob
Between					
Subjects	0.2305E+05	39			
A	0.1746E+04	1	1746.365	3.115	0.086
Subjects					
Wthn Group	0.2130E+05	38	560.567		
Wthn					
Subjects	0.6501E+04	40			
B	0.8269E+03	1	826.903	5.628	0.023*
AB	0.2581E+02	1	25.812	0.176	0.677
B X SUBJ					
Wthn Group	0.2581E+02	38	146.936		

$p. \leq .05$

TABLE 11

Two-Way Analysis of Variance
for World of Work

Source of Variation	Sum of Squares	D.F.	Mean Squares	F Ratio	Prob
Between					
Subjects	0.1251E+05	39			
A	0.6632E+03	1	663.172	2.127	0.153
Subjects					
Wthn Group	0.1185E+05	38	311.763		
Wthn					
Subjects	0.7942E+04	40			
B	0.8220E+03	1	822.016	4.482	0.041*
AB	0.6148E+02	1	61.476	0.335	
B X SUBJ					
Wthn Group	0.6969E+04	38	183.395		

$p \leq .05$

group, nor for Factor B, pre-post.

As such, research question two is not given affirmation. Research question two requires statistical evidence for treatment effect as measured by an significant increase in mean scores of the experimental group over the control group from pre-test to post-test. No evidence to support research question three is found. Research question three presumes that increases in scores from pre-test to post-test by both groups will reflect an increase in career maturity over time. An examination of the separate group scores for Factor B (pre-post) reveals a slight growth in scores for the experimental group, countered by a slight loss for the control group thereby showing a non-significant effect for time. No evidence for interaction is found.

Insert Table 12 about here

TABLE 12

Two-Way Analysis of Variance
for Knowledge of Preferred Occupation

Source of Variation	Sum of Squares	D.F.	Mean Squares	F Ratio	Prob
Between Subjects	0.1019E+05	39			
A	0.2383E+02	1	23.827	0.0989	0.767
Subjects Wthn Group	0.1017E+05	38	267.677		
Within Subjects	0.7271E+04	40			
B	0.7331E+01	1	7.331	0.041	0.840
AB	0.5004E+01	1	500.434	2.824	0.101
B X SUBJ Wthn Group	0.6734E+04	38	177.202		

p. $\leq$ .05

CHAPTER VI

RESULTS OF QUALITATIVE DATA

Introduction

The writer uses repsonsive data in this chapter as outlined by Stake (1977) to address four topics relevant to the qualitative evaluation of this study. These topics are: 1) responsive data from a questionnaire; 2) responsive data regarding various activities of the unit; 3) instructor's modifications to planned program implementation; and 4) instructor's perceptions of strengths and weaknesses of the unit.

The post hoc responsive data was obtained from the five participants in the study, who remain in Harry Collinge High School in 1988, either up-grading their grade twelve marks (1) or completing their grade twelve (4). These responses are not from a random sample of participants. The method of gathering the response data was by means of an informal questionnaire using a series of eleven questions generated by this writer. Each of the respondents was asked to formulate answers that were indicative of an "objective" appraisal of their experiences rather than what they thought the writer might like to hear. Results of the questionnaire are shown in Table 13 given in Appendix C.

RESPONSIVE DATA FROM A QUESTIONNAIRE

Tables 13 reports the responsive data from five participants in the study, who were members of the experimental group. The reader will note that all five reported prior career

evaluate newspaper articles that showed economic or career trends for the future in Alberta. Three reported liking the activity, while two stated that they disliked it because they didn't understand the newspaper and/or the issues described.

In using the interest inventory "Destiny", three reported disliking it for reasons that it was too long and demanding, while two said they liked doing it.

A general agreement by the five participants was that interviewing people in the occupation was the most satisfying activity that the unit offered. The general consensus of the five participants was that career guidance materials seem heavily slanted toward the academic students and those planning to attend university or college. They reported feeling bewildered by the organization of many of the publications. The reading level of the materials was also considered high and this presented difficulties for them, according to the discussion.

The general discussion also focused on motivation with respect to Career Education activities in general. Melanie said, "Sometimes you feel that you don't want to think about it (career decisions). Kim and Cheryl agree. Cheryl says, "I don't think I got anything out of it because I still haven't made a decision about what I'm going to do." Maureen suggested that there really wasn't much point in trying your best on the inventory (CDI) since there was no reward for such effort. Mari expressed her dislike for the forced choice on the CDI subtest entitled "Knowledge of the

Five of the five participants stated that they believed that English 33 was more interesting because of the integration of the unit of instruction. Four of the five, indicated that the time allotment was perhaps too lengthy and that the unit of instruction "dragged on."

RESPONSIVE DATA REGARDING VARIOUS ACTIVITIES OF THE UNIT

These data were obtained in an informal discussion with the students on a post hoc basis on what they liked or disliked about the activities related to the unit of instruction.

Five of the participants reported enjoying the examination of their cumulative school records which showed samples of their school pictures, assignments, marks, standardized test results and career guidance inventories from past grades. This activity, they felt showed them how they had grown and matured in cognitive and emotional aspects as well as in their physical appearance. They further concurred that the Hire-A-Student presentation which was given during their career work was very relevant to job search and interview strategies. Their perceptions of the type of experience that was presented by having to write a research report on their preferred occupation, varied. Three of the responses cited it as a "good" experience, one cited it as "hard" and another cited it as an "easy" experience.

The media literacy activity which involved a critical thinking approach to reading the newspaper, drew varied responses, also. The activity was designed to have students select, summarize and

education experiences in English 23, and four report having previously accessed career information with "Career Factory". When asked to give two words to describe their feelings about the use of the Career Development Inventory, the most frequent responses were "hard to understand" and "too specific to one occupation." That it was "boring" and that answers "could be guessed" were also given as responses. In terms of maximum performance one person reported having performed equally well on both pre-test and post-test. The highest number (four) reported "trying harder" on the post-test. Three students responded that they had changed their preferred occupations during the study, with two retaining their pre-test choices of occupation.

A further question on whether changes in preferred occupation had occurred since the study, showed that only one out of the five had made a significant change. With respect to the effect of grade level on their motivation to do well on the unit of instruction, four reported that they perceived their motivation would have remained the same.

Four of the five reported marks between 80% and 90% on their career booklet, with four of five reporting course marks of between 60%-70% and one reporting a 76% course mark for English 33. Four perceived one question on the departmental examination, which was having to write a business letter, as being directly related to their career work.

Preferred Occupation". She noted that she was considering several occupational groups during the post-test and wasn't consistent in her responses on that sub-test, as a result. The decision-making activities of short-term goal setting and long-term goal setting were considered difficult for many of the participants. Kim remarked, "I didn't know the difference bet ween the two types of goals."

INSTRUCTOR'S MODIFICATIONS TO PLANNED PROGRAM IMPLEMENTATION

Two circumstances as noted in Chapter III, changed the nature of the planned program implementation as outlined in the "Suggested Sequence of Student Activities." These two circumstances were: 1) the Differential Aptitude Test (DAT) administration and interpretation of results; and 2) the modifications made to allow for individual differences in exposure to Career Education experiences.

The DAT administration and interpretation was conducted with the help of the counselling staff. The procedure took about five hours of the scheduled class time of thirty-hours, which the unit of instruction was to fulfill. Time allotments for certain planned activities were thereby reduced or expended. Some activities which were not given any of the allotted time, were: collages, and role-plays. Role plays for decision-making, were to utilize the 7-step model and were designed to facilitate both knowledge of the process as well as skill in knowing how to apply the model to actual situations. Time constraints also led to elimination of the

"Behavioral Objectives Checklist" as a "process" evaluation instrument.

Speeches were replaced with the option of writing an essay on "Dreaming is Tree", "In Ten Year's Time" or "Success".

A further circumstance of having to make modifications to the planned activities was related to various career education experiences. One of these, was the exposure by some of the students to career education activities in the prior English 23 language arts. Also some students had experienced using the "Career Factory", system previously. A differing approach or restructuring of some activities was necessary in avoiding redundancy for these students. The resulting change in program activities meant that not all students performed the same activities or used the same time frame as others.

The effect of such changes are not extreme, perhaps, but it does have implications for the scientific research paradigm given the lack of rigor the changes precipitate. These changes occurred in spite of planning, that sought to decrease the effect of confounding variables (Lawson, 1975).

INSTRUCTOR'S PERCEPTIONS OF STRENGTHS AND WEAKNESSES OF THE UNIT

The instructor observed strengths in the unit of instruction related to the specificity of the guidelines and the positive effect on the English 33 course work. Weaknesses lay in the CDI sub-test relating to Decision-Making as well as in the lack of

budgetary considerations between the two areas of Counselling and English. A further area for possible improvement was in coordination of all Career Education activities in the junior-senior high school in the future.

The two guidelines referred to in Chapter III as: The Unit Outline and the "Suggested Sequence of Activities" were according to the instructor, clear enough for any competent teacher to follow. He also observed that a good variety of activities was given which allowed for all the processes of reading, writing, viewing, listening and speaking to be employed. A sufficient choice of activities, provided options that allowed for adaptations that an English language arts teacher might easily make.

Other observations were that the "Road Ahead" had not been disruptive to the teaching of English 33 course work. The instructor reported very good marks on the average, on the career booklet and noted that perhaps the personalities of the class members were such that they were willing and able to follow very specific directions to accomplish tasks. The departmental examination results did not appear to differ significantly from those in previous years in this high school, confirming his perceptions that the "Road Ahead" had not detracted from the English 33 curriculum.

With respect to the CDI Inventory as an evaluation instrument, he observed that it had a high correlation to the final task of producing the evaluated activities, especially the career research

report. That is, each dimension represented by the CDI appeared facilitative toward the final task. One weakness of the CDI cited by the instructor was the Decision-Making subtest. In his opinion, the hypothetical situations given, may be a "step removed" by virtue of initials being used to designate the individuals facing choices. Perhaps a directive such as "what would you do?" might involve the student to a greater extent in each anecdote, requiring a decision-making response.

The major weaknesses of the project were cited by the instructor who is head of the English department, as being those related to budgetary concerns and also co-ordination of this unit with other career education projects within the school. In the first instance, no financial collaboration was done with counselling department to defray costs of duplicating relevant materials, or of ordering further copies of guidance materials needed for a class project. The coordination of career education projects within the school is needed in terms of linking up the junior high "Health & Personal Life Skills" as well as individual career activities that counsellors and teachers are undertaking as part of English language arts or other content areas. A further necessity for coordination will be manifested when this high school implements, "Careers and Life Management", in the fall of 1988.

CHAPTER VII

SUMMATIONS AND IMPLICATIONS

Introduction

The writer addresses five topics in this chapter that are essential to the summation of this study. These are: 1) summaries of qualitative and quantitative data; 2) findings of the study; 3) recommendations for further use of the unit of instruction; 4) limitations and delimitations and 5) concluding statement.

Summary

The results of the qualitative data of the integrated unit, "The Road Ahead" indicated that the unit was well-received. It appeared to fulfill a need for opportunities to explore Career Education activities using a systematic approach, which the students would not otherwise have had. The creation of an "awareness" in these students described by Super as an "arousal or recognition of a need" is perhaps the single most important effect of the program. Further aspects, supported by the qualitative data, that were facilitated by "The Road Ahead" are: 1) more interest and effort in English Language Arts activities that reflected career development tasks, especially if performance was reinforced (evaluated); 2) a perception that career information may be obtained from many sources, the most potent of which is someone in the career; 3) a willingness to participate in a variety of exploration activities; 4) a recognition that people develop and change in many ways during their schooling, especially in career

orientations; 5) a recognition that one must be informed of issues and be familiar with media to be able to assess current trends in economics or occupations; 6) a perception that many career education materials found in guidance offices seem slanted toward academic students; 7) a perception that the "forced choice" on the scale Knowledge of Preferred Occupation of the Career Development Inventory didn't allow for demonstrating general knowledge of a range of occupations; 8) a sense that more instructional attention was needed on goal setting (Decision-Making); 9) a perception that the unit of instruction did not disrupt or detract from the English language arts course and that departmental standards were maintained.

The quantitative data shows that significant differences in the expected direction were found on the dimension of Career Exploration. Further promise as to the potential of the unit to facilitate career maturity was observed in a significant interaction on the Career Planning scale. This along with a trend toward interaction as evidenced by the Knowledge of Preferred Occupation scale indicated that both conative and cognitive aspects were positively influenced in a way that has practical and educational importance. While growth patterns were positive for the experimental group in Decision-Making (D.M.) and World of Work (W-W) scales, the DM scale showed less than expected growth, given the unit's planned emphasis on this dimension.

FINDINGS

1) Considerable variability in career maturity exists within each student and within each group of students as well as between groups of students, enrolled in a general curriculum (English 33), as measured by the CDI.

2) Career maturity in senior high students appears to increase significantly over a time span as brief as 10 weeks, in both the conative and cognitive domains with the exception of one scale measuring Knowledge of Preferred Occupations, as measured by the CDI.

3) Career maturity in the experimental group appeared to be influenced significantly by the instructional unit in the conative domain as measured by the Career Exploration scale of the CDI.

4) Career maturity in the experimental group appeared to be influenced in a positive direction, although not significantly so, by the instructional unit in Planfulness, Decision-making skills, Information about the World of Work and Knowledge of Preferred Occupation as measured by the CDI.

5) Career maturity may be influenced in a positive direction by an instructional unit integrating career objectives with English language arts, when taught by a language arts teacher.

6) Career maturity in the experimental group appeared to show the greatest increase, in those scales of the CDI which related well to reinforced activities in the unit of instruction.

RECOMMENDATIONS

1) That the study be repeated with these changes:

a) the Career Development Inventory be replaced with a less costly inventory, which represents a similar career development theory, such as the Career Maturity Inventory by Crites.

b) a more "infused" approach be used to determine if the longer time frame would significantly alter the gains made on the cognitive scales.

c) an assessment of potentially relevant attributes of the population being sampled be obtained before the study begins to determine possible environmental influences (e.g. availability of jobs) as well as personal influences (e.g. locus of control on the outcomes of the study.

d) change locations to see whether generalizability to other Alberta centres can be increased.

e) establish where the difficulties lie, in terms of the decision-making dimension.

Then make the necessary adjustments in the "Unit Outline" to provide whatever is needed in instructional terms. Replacing the Edmonton Journal Kit on critical-thinking with the decision-making module could be useful.

f) reinforce activities represented by the scales of the inventory used, by evaluating them.

g) give considerations to budgetary concerns with respect to

materials for the study.

h) gather further qualitative data throughout the study by means of participant journals.

LIMITATIONS AND DELIMITATIONS

The limitations of this study as they impinge upon the generalizability of its findings relate to research design, time considerations and program developer - teacher affect. With respect to research design two observations are pertinent. One, is that the lack of randomness in sample selection, and the lack of random assignment of groups to treatment, limits these results to similar samples in terms of age, grade and location. The second observation is that the study employed a pre-test/post test design which may have influenced the findings. The length of the study of ten weeks duration and the affect of the teacher of the unit who had also assisted in its development may be further limitations.

Delimitations with respect to replication of these findings would necessitate selection of samples of age ranges from sixteen to nineteen, grade levels of eleven and twelve and from differing locations. One sample was derived from a town with a predominantly industrial base. The second sample was taken from a village with a predominantly agricultural base. The fact that this study was specified as pertaining to the English 33 language arts curriculum, further circumscribes any future studies. The focus on facilitating career development as espoused by Super et al.,

resulted in program orientation and evaluation strategies designed to measure a particular construct. This construct, identified as career maturity and measured by the Career Development Inventory in a pre-test/post-test design specifies and delimits any further research.

CONCLUDING STATEMENT

From the writer's perspective, the highlight of the study was the "collaborative approach" used. It allowed for "networking" and sharing perspectives among professionals. The fact that the head of the English department has begun implementing a short-course in the academic language arts course, English 30, utilizing career education activities, represents one unexpected out growth of this collaboration. The writer benefited immeasurably from the provision of the latest state-of-the-art materials and guidance given by the career education specialist, in the university setting.

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APPENDIX A

Unit Outline, Suggested Sequence of Activities

and

Behavioral Checklist

MAJOR GOAL 1: DEVELOPING COMMUNICATION SKILLS RELATED TO CAREERS

General Objectives	Content	Resources
STUDENT: A. Experiences a variety of career and life themes through familiarity with literature.	1. Themes found in the literature: (a) Career choices we make influence: i) our work ii) our status iii) our self concept iv) our self-identity v) our lifestyle vi) our friendships vii) our mates viii) our children ix) our satisfaction (b) Allowing others to choose for us. (c) Educational and societal hurdles. (d) Personal qualities affect success. (e) Do's and Don'ts in a job interview. (f) Pitfalls of the first job experience. (g) Exploitation in the workplace. (h) Preventing workaholism.	Prescribed Text: Discovering THE ROAD NOT TAKEN, p. 223 WARREN PRYOR, p. 222 THE STOKER, p. 204 THE VERGER, p. 224 THE EMPLOYMENT INTERVIEW, p. 207 YOUR FIRST JOB, p. 212 9 to 5, p. 215 OUT OF THE WORK TRAP, p. 229 TEACHERS GUIDE TO DISCOVERING lists questions for: - pre-reading discussion - understanding - writing and discussion - extension and enrichment
B. Uses language in a variety of ways to enhance self-discovery and relationships.	2. Language is used in reading, writing, speaking, listening, viewing and its use must be governed by: (a) The reason for the communication. (b) The recipient or audience of the communication. (c) The form of the communication. (d) The theme or content of the communication.	Communication Activities taken from Peer Support Training Manual published by ADAAC.

MAJOR GOAL 1: DEVELOPING COMMUNICATION SKILLS RELATED TO CAREERS

General Objectives	Content	Resources
C. Recognizes importance of different types of written communication.	3. Knowing a variety of written ways to express ones thoughts and feelings is an important skill: (a) personal journals (b) letters I) letter of opinion or complaint II) letter of inquiry III) letter of application or covering letter Iv) thank you letter (c) resumes I) functional II) chronological (d) essays I) definition II) opinion or philosophical III) argument	JOB SEEKERS HANDBOOK Available from: Career Services Branch 201 Sun Building 10363 - 108th Street Edmonton, Alberta, T5J 1L8 1985 JOB SEARCH INFORMATION SERVICE Available from: Hire-A-Student Alberta Manpower Parkside Building 10924 - 119th Street Edmonton, Alberta, T5H 3P5
D. Investigates and interprets various media.	4. Newspapers, films and television present challenges to our abilities to comprehend the world around us and involve constant evaluation with regards to: a) their power to influence b) biases, stereotypes c) accurate information	Prescribed Text: Compositions 6 Print: 1. WHAT IS THE POINT OF WORKING? 2. OMEGA - E. Kubler-Ross 3. HOW A SENSE OF PURPOSE IN LIFE CAN HELP YOU OVER THE BUMPS - Viktor Frank 4. HAPPINESS - Malcolm Muggeridge Film: THINK TWICE THEY'RE CONFUSING YOU Available from CAMS THE EDMONTON JOURNAL Student copies and Kits on Decision-Making Critical-Thinking

GOAL II: INCREASING SELF-AWARENESS

General Objectives	Content	Resources
STUDENT A. Examines and clarifies philosophies and values related to life's work.	1. Human philosophies and values influence one's: (a) Beliefs and attitudes. (b) Behavior and choices. (c) Perceptions and satisfactions. 2. We infer others philosophies and values by: (a) Systematic appraisal of facts, concepts and values stated in their written or spoken work. (b) Observation of their behaviors and choices. (c) Inquiring about their perceptions and satisfactions and conversing with them to understand their point of view. 3. We clarify our own philosophies and values by: (a) Reflection on past and present attitudes. (b) Dialogue with others. (c) Ranking values. (d) Evaluating our current behaviors. (e) Examining our future intentions.	PRINT: Recommended List 1. WHAT IS THE POINT OF WORKING? 2. OMEGA - E. Kubler-Ross 3. HOW A SENSE OF PURPOSE CAN HELP YOU OVER THE BUMPS - Viktor Frankl 4. HAPPINESS - Malcolm Muggeridge *5. Student Choices Good opportunity to utilize Student's favorite literature
B. Understands the personal significance of work.	4. We gain perspectives on what work means to us and various people through: (a) Examining quotations. (b) Reading biographies. (c) Interviewing people. (d) Inviting speakers. (e) "Dreaming" about and planning our futures. (f) Talking with out friends and relatives.	Bartlett's Familiar Quotations by John Bartlett

General Objectives	Content	Resources
C. Relates philosophies, values, aptitudes, interests, needs to occupations.	5. Better understanding and selection of occupations occurs when we systematically analyze, then synthesize our: (a) values (b) aptitudes (c) interests (d) needs (e) personal qualities	Destiny: Career Planning Manual Available from: University and College Placement Association 1209 King St. West Toronto, Ontario, M6K 1G2 Career Factory: a computer program for career planning. Other Interest Inventories: Life Roles Inventory Strong-Campbell Interest Inventory PsiCan Consulting Ltd. Box 170 Student's Union Building University of Alberta Edmonton, Alberta, T6G 2J7 Work Values Inventory
D. Understands how personal needs can be met through leisure, recreation and personal growth endeavors.	6. Knowledge of how to meet our needs by means other than through work and careers is important in the light of: (a) Higher unemployment. (b) Rapid changes in the work world. (c) Possibilities of disease, disability, other unforseen factors. (d) More available time through flexible scheduling.	PRINT: THE GREAT BALANCING ACT Available from: Career Services Community Calendar of Courses and Activities YREC Calendar - Yellowhead Regional Educational Consortium Hinton, Edson, Jasper, Grande Cache

GOAL III: RECOGNIZING THE VARIETY AND COMPLEXITY OF WORK

General Objectives	Content	Resources
STUDENT: A. Learns how to access information on work, further education, careers.	1. Knowledge and skill is necessary in locating and interpreting information from many sources such as: (a) films (b) videos (c) speakers and individuals (d) post-secondary calendars (e) technical books (f) journals (g) newspapers (h) telephone directories (i) career monographs (j) Canadian Classification and Dictionary of Occupations (two volumes)	Films: THE WORLD OF WORK HOW A CAREER DEVELOPS DOING YOUR 8 (series) Available from CAMS Videos: BY CHOICE or BY CHANCE WHAT ARE YOU GOING TO DO? Available from: Career Services Branch as are the following: PRINT: IT'S ABOUT TIME OCCUPATIONAL PROFILES KIDS AND CAREERS SO YOU'VE LEFT SCHOOL ? WHAT NOW? APPRENTICESHIP OPPORTUNITIES DISTANCE EDUCATION SO WHAT'S AN ENTREPRENEUR ANYWAY? Career Trends Available from Calgary Public School Board "Exploring Business Opportunities" Available from: Ministry of Industry and Small Business Development Vancouver, B.C., V6Z 2C5

GOAL III: RECOGNIZING THE VARIETY AND COMPLEXITY OF WORK

General Objectives	Content	Resources
B. Describes specific topics outlining and occupational area or career.	2. Comprehensive research and knowledge of a job or career involves examining: A BASIC OUTLINE FOR STUDYING OCCUPATIONS OR CAREER NAME OF OCCUPATION OR CAREER 1) Common title. 2) Other titles. NATURE OF THE WORK 1) Duties. 2) Activities, responsibilities. QUALIFICATIONS 1) Limitations place on age, sex, moral background. 2) Physical and mental aptitudes and abilities required. 3) Personality, temperaments and interests suggested. 4) Special skills needed. 5) Special tools required and expected cost of these. PREPARATION NEEDED 1) Types opf training required. 2) Where training is available. 3) Entry requirements for training. 4) Length of training. 5) Cost of training. LICENSING REQUIREMENTS 1) Licence or certificate required. 2) Qualifications needed to obtain either. 3) Applications for same. 4) Cost of licence or certificate. WORKING TIME 1) Continuous, seasonal or periodic. 2) Regular or shift. INCOME 1) Starting salary, average salary, maximum salary. 2) Fringe benefits and extras. OPPORTUNITIES FOR ADVANCEMENT 1) Opportunities for growth and specialization. 2) Promotions. EMPLOYMENT OUTLOOK 1) Employment outlook now and 5 years from now. ADVANTAGES AND DISADVANTAGES OF THIS CAREER	SMALL BUSINESS IS GOOD BUSINESS and numerous other publications available from: Tourism and Small Business 17th Floor, 10025 Jasper Ave. Edmonton, Alberta, T5J 0M4 Calendars and publications from universities, colleges, technical institutes, trade schools for Alberta, whose names are listed in "It's About Time". Guidance counsellor can be most helpful in acquiring and supplying needed information and materials. Inform students about: Career Hotline Career Centres

GOAL III: RECOGNIZING THE VARIETY AND COMPLEXITY OF WORK

General Objectives	Content	Resources
C. Discerns what factors are related to job availability and demand for career-related work.	3. Awareness of rapid change now and in the future makes our career selection tenuous and highly dependent upon our own desire to be informed of employment trends through extensive reading, viewing discussion of: (a) Graduate employment information. (b) Economic forecasts. (c) Population shifts. (d) Industrial trends. (e) Legislation affecting work. (f) Technological change. (g) Government funding. (h) Resource management. (i) "Innovative and Creative" approaches.	Career Section of Edmonton Journal Other Newspapers & Magazines Business Weekly Alberta Report Financial Times, etc. Local graduate surveys are very valuable here and show "real" trends for your high school and area. GRADUATE PLACEMENT information is available from most post-secondary institutions in Alberta.
	4. Preparation by broad-based skill development is our best approach in terms of dealing with uncertainty or lack of information.	PRINT: "TEN HOTTEST TRANSFERRABLE SKILLS" taken from: THE COMPLETE JOB SEARCH HANDBOOK: PRESENTING THE SKILLS YOU NEED TO GET ANY JOB AND HAVE A GOOD TIME DOING IT, by Howard Figler HOLT, Rinehart and Winston, N & 1979.

GOAL III: RECOGNIZING THE VARIETY AND COMPLEXITY OF WORK

General Objectives	Content	Resources
D. Develops techniques of job search, job acquisition and job maintenance.	5. Knowledge and skills are important in approaching job sources: (a) Friends and relatives. (b) Personal contacts with others. (c) Advertisements. (d) Work experience programs. (e) Volunteer work. (f) Business canvassing. (g) Offering a service. (h) Hidden job market. (i) Employment agency. (j) Telephone directories. (k) Research on companies.	JOB SEARCH INFORMATION GUIDE available from: Special Education Services Alberta Education. THE HIDDEN JOB MARKET Government Agencies which help busines ventures: Alberta Opportunity Co. Alberta Tourism and Small Business Counselling Assistance to Small Enterprises Federal Business Development Bank Kit - English on the Job
	6. Knowledge and skills assist us in obtaining jobs through contacts using: (a) Telephone. (b) Personal interview. (c) Letters of introduction. (d) Letters of application. (e) Letters of reference. (f) Chronological resumes. (g) Functional resumes. (h) Follow-up.	
	7. Knowledge of employer expectations and workers responsibilities and rights and fulfillment of these to our mutual benefit assists us in maintaining jobs.	Unit 8 & 9 in Job Search Information Guide. Occupations 10 Alberta Correspondence Barrhead, Alberta

GOAL IV: KNOWING HOW TO DECIDE

General Objectives	Content	Resources
STUDENT A. Utilizes career decision-making model to make and assess choices.	1. Recitation and understanding of the following steps in the decision-making model will aid in systematically considering aspects of cost, reward, values in making a tentative career choice. Seven Steps to Decision-Making: (a) Identify the situation requiring a decision. (b) Discover the alternatives. (c) Research the alternatives. (d) Weigh the pros nd cons of each alternative. (e) Prioritize the alternatives and make the decision. (f) Plan how to put the decision into action by listing goals and timelines. (g) Take action to put decision into effect.	"It's About Time"
B. Sets long term goals, intermediate and short term goals to effect choices.		

SUGGESTED SEQUENCE OF STUDENT ACTIVITIES

I. Introduction Activities:

(a) Introduce unit by reading "The Road Not Taken" by Robert Frost. Use teacher's guide for suggestions for discussion that allow students to become interested in the personal value that this unit can offer.

(b) Hand out an outline of goals and objectives and evaluation methods including outline for career booklet and behavioral checklist.

II. Communication as First Goal:

(a) Collages

- each student brings a collage to class that represents his/her major interests, characteristics, values.
- students form dyads and share collages verbally.
- partners introduce one another using information gained in (b).
- collages are put up for display.

(b) Speech

- each student prepares a 3 to 5 minute talk on "In Ten Year's Time" or "Dreaming is Free."
- emphasis is on student's dreams for his future.
- suitable for peer evaluation/option - essay defining "Success."

(c) Quotations

- each student finds a quotation on work.

- interpretations and reactions are shared.

(d) Further selections from Discovering - students may form groups and choose one of the selections given on content list to present to class when themes are appropriate to sequence of activities. i.e. My First Job, Goal III Recognizing the Variety and Complexity of Work; Objective D - obtaining and maintaining a job.

III. Developmental Activities:

A. Understanding yourself as second goal.

1. Reactions: each student reads "What is the point of Working?" and one other recommended reading from Resources and reacts in discussion to philosophies presented.

2. Past Records: each student examines his/her cumulative records for: Differential Aptitude Results (Gr. 9), Self-Directed Search (Gr. 9, Subject Strengths and Weaknesses, Career Factory Print-out - previous results may be expanded or modified.

*3. Interest Surveys: each student fills out "Destiny" and other surveys as needed to provide a balanced view of the students' values, interest, characteristics, skills and aptitudes. *See suggested resources.

*4. Self-Profile Summary Sheet: students fill out the summation of their self-exploration and tentatively select a career for research.

5. Literary Selections: continue with Warren Pryor, The Stoker, the Verger.

B. Recognizing the Variety and Complexity of the World of Work as third goal.

1. Media Literacy: students develop awareness of evaluation of information delivery systems such as films, videos, newspapers.

(a) Film - Think Twice They're Confusing You

(b) Edmonton Journal Kit - using critical thinking

2. Trends and their effect:

*(a) Select articles from Edmonton Journal that relate to factors that influence job availability.

(b) Summaries are made of articles to be shared orally or in written form.

(c) Comparison of Job Availability now, 5 years ago, 10 years ago using Edmonton Journal ads.

(d) Synthesis of trends is made and students predict whether the career they have chosen will be in demand in the future.

3. Post-Secondary Training/World of Work:

(a) View appropriate films, videos (Resource List).

(b) Use information gleaned from listening to post-secondary presentations. Encourage student initiative toward asking questions, collecting materials for career booklet.

(c) Access information through:

i) Reading career guidance materials. *Counsellor may run sessions on interpretation of Canadian Classification and Dictionary of Occupations.

ii) Former students.

iii) Personal interview.

iv) Shadowing a worker.

v) Letter writing.

*(d) Use tentative career choice made earlier and write a 3 to 5 page research paper.

(e) Evaluate career materials for accuracy.

(f) Play "Chance" - people select cards as in Monopoly. These cards describe hypothetical happenings in the future. Students reflect and express how they would cope.

4. Writing Activities

(a) Use English on the Job Kit or Compositions Ch. 9 to write letters:

i) persuasive (complaint or opinion)

ii) inquiry

iii) covering or application

iv) thank you

*(b) Write personal fact sheet.

*(c) Fill out two application forms

*(d) Write two resumes:

i) functional

ii) chronological

5. Selections - 9 to 5, Out of the Work Trap, The Employment Interview, Your First Job

6. Role Play - Job Interviews, use local employer as resource. Videotape these for discussion.

7. Job Expectations and Maintenance.

C. Knowing How to Decide

1. Role Play using the 7 stage model

*2. Write plan for goal achievement:

i) short term

ii) long term

CONCLUDING ACTIVITIES

Put all * items into a well-organized Career Booklet.

CHECKLIST FOR BEHAVIORAL OBJECTIVES:
Cognitive, Affective, Psychomotor Domains

RATINGS = 1: Low
5: High

C ____/14; A ____/14; P ____/12.

Domain	Introductory Activities	SELF 1 2 3 4 5	PEERS 1 2 3 4 5	TEACHER 1 2 3 4 5	Totals
C	1. Infers reasons for Robert Frost's choice.				
P	2. Makes a collage.				
A	3. Displays interest in describing his collage.				
A	4. Listens attentively to partner's description of collage.				
A	5. Speaks positively when introducing partner to class.				
C	6. Organizes his speech using introduction, content, conclusion.				
P	7. Demonstrates enthusiasm in posture and presentation.				
A	8. Accepts constructive feedback.				
A	9. Displays sensitivity to others' presentations.				
P	10. Finds appropriate quotation(s).				
C	11. Demonstrates comprehension of quote.				
P	12. Enters discussion on quotes.				
	DEVELOPMENTAL ACTIVITIES				
P	13. Contributes to discussion on "What is the point of Working?"				
P	14. Selects and reads selection from "Recommended List".				
A	15. Shares values with another person or group.				
A	16. Displays interest in examining contents of file.				
P	17. Finds appropriate items and records accurately.				
P	18. Fills out "Destiny".				
A	19. Shows initiative in using Career Factory.				
C	20. Describes strengths and weaknesses.				
A	21. Recognizes himself as a unique person.				
C	22. Verifies his skills, aptitudes, interests.				
C	23. Decides upon reasonable career choice.				
C	24. Identifies factors that influence his choice.				
C	25. Relates literary themes to personal experience.				
C	26. Identifies sections of newspaper.				
A	27. Volunteers to perform classroom tasks, eg. run projector.				
A	28. Assumes active roles as group leader, member.				
A	29. Accurately evaluates peers' work.				
C	30. Demonstrates ability to interpret C.C.D.O. codes.				
C	31. Evaluates the relevancy of data.				
C	32. Predicts job availability based on data.				
C	33. Recognizes use of biases, stereotypes in media.				
A	34. Cooperates with peers in finding information.				
P	35. Makes personal contacts to obtain information.				
P	36. Revises written work.				
C	37. Utilizes 7 stage decision-making model.				
	CONCLUDING ACTIVITIES				
P	38. Explains goal plan adequately.				
A	39. Meets deadline pressures.				
P	40. Completes project as required.				

APPENDIX B

Calculations for Net Shift

and

Unit Facilitators

Experimental Group

	D.M.			W.W.	losses	gains	
Bea	85/75	-25	76/72	-4	3	2	-1
Bib	108/90	-18	91/103	+12	1	4	+3
Cal	100/116	+16	103/103	0	1	4	+3
Cur	85/110	-25	91/68	-23	1	4	+3
Del D	100/75	-25	84/107	+23	2	3	+1
Del M	90/85	-10	110/95	-15	5	0	-5
Goertz	50/80	+30	103/80	-23	2	3	+1
Gosh	80/90	+10	68/90	+22	1	4	+3
Gubbe	116/100	-16	72/100	+28	3	2	-1
Hill	95/110	+15	72/110	+38		5	+5
Joh	110/90	-20	91/91	0	2	2	0
Karl	70/80	+10	64/95	+31	2	3	+1
Kat	65/85	+20	76/80	+4	1	4	+3
Knu	50/80	+30	84/76	-8	2	3	+1
McCallam	131/121	-10	119/119	0	2	2	0
McCol	65/80	+15	84/87	+3		5	+5
Novaks	105/110	+5	111/110	-1	1	4	+3
Payette	55/70	+15	80/91	+11		5	+5
Phi	95/110	+15	99/111	+12		5	+5
Powers	60/90	+30	76/84	+8	1	4	3
Rees	65/80	+15	99/107	+8	1	4	3
Sandmaier	90/116	+26	64/115	+51		5	5
Stotts	85/85	0	103/103	0	1	2	1

Experimental Group

C.P.			C.E.		P.O.	
	5/6	Net Gain or Loss				
*Bea	72/109	+37	95/87	-8	117/123	+6
*Bib	79/106	+27	108/110	+2	91/117	+28
Cal	94/128	+34	85/151	+66	100/97	-3
Cur	108/116	+8	98/116	+18	68/117	+49
Del.D	116/123	+7	132/120	-12	110/120	+10
Del.M	150/142	-8	155/135	-15	110/78	-32
*Goe	106/125	+19	128/148	+20	113/100	-13
Gosh	80/105	+25	86/119	+33	123/110	-13
*Gubbe	124/112	-12	141/129	-12	97/127	+30
*Hill	136/140	+4	79/112	+33	87/94	+7
*Joh	108/114	+6	141/96	-45	68/113	+45
*Karl	128/123	-5	103/113	+10	94/87	-7
*Kat	83/90	+7	86/136	+50	117/87	-30
*Knu	71/106	+35	118/115	-3	68/94	+26
McC	73/98	+25	73/107	+34	117/94	-23
McC	84/99	+15	65/84	+19	107/117	+10
*Nov	71/94	+23	93/102	+9	78/97	+19
Pay	88/94	+6	95/100	+5	87/100	+13
Phi	123/128	+5	142/152	+10	74/91	+17
Pow	121/127	+6	118/141	+23	100/84	-16
Rel	118/244	+26	107/90	-17	74/100	+26
*Sam	52/69	+17	52/118	+66	107/120	+13
*Sta	136/132	-4	124/132	+8	104/123	+19

Control Group

D.M.			W.W.		losses	gains	total shift
Anb	110/116	+6	64/99	+35	2	3	1
Ank	95/75	-20	107/91	-16	4	1	-3
Ben	105/110	+5	99/111	+72	1	3	2
Can	70/110	+40	107/95	-12	4	1	-3
F	80/90	+10	68/84	+16	1	4	3
G	90/80	-10	95/90	-5	4	1	3
Jen	75/85	+10	80/84	+4	1	4	1
Kdd	105/90	-15	111/107	-4	5		-5
Lee	121/136	+15	123/115	-8	2	3	+1
Mc	85/75	-10	99/111	+12	4	1	-3
Ree	75/95	-20	99/103	+4	3	2	-1
Rei	99/105	+6	87/99	+12	3	2	-1
Rob	87/110	+23	81/111	+30	2	3	+1
Tut	126/105	-21	115/72	-43	-5	0	-5
Ude	65/85	+20	64/80	+16	4	0	+4
Vei	110/116	+6	111/119	+8	0	4	+4
Vei	120/131	+11	95/123	+28	2	3	+1

Control Group

	Control Group		C.E.		P.O.	
*Anb	95/87	-8	95/84	-11	107/123	+16
AnK	79/78	-1	79/108	+29	120/113	-7
*Ben	78/97	+9	78/113	+35	107/94	-13
*Cou	136/133	-3	136/67	-69	97/91	-6
Foi	71/78	+7	71/104	+33	107/104	-3
Ger	113/109	-4	113/115	+2	120/113	-7
*Jen	114/150	+36	114/149	+35	120/74	-46
Kid	110/88	-22	110/97	-13	127/120	-7
Lee	110/114	+4	110/97	-13	87/110	+23
*Naw	113/93	-16	113/103	-10	110/84	-26
Ree	98/118	+20	98/110	-12	87/74	-13
*Rie	102/73	-29	102/87	-15	107/91	-16
*Rob	97/99	-2	97/83	-14	87/100	+13
Tut	246/120	-26	146/71	-75	104/97	-7
Ude	76/102	+26	76/101	+25	97/97	0
Vei	116/116	0	116/121	+5	94/104	+10
Ver	118/106	-12	118/90	-28	97/110	+13

Response Analysis of Career Planning (in percent)

Item Description What have you done so far:	Experiments Pre-Test	Post-Test	Net Shift	Control Group Pre-Test	Post-Test	Net Shift	Unit activities
1.* Infor gathering library, letters talking	47	52	+5	48	30	-18	- Career Report
2.Discussion with significant adult	35	34	-1	18	18	0	
3.Taking classes to help decide	39	46	+7	42	30	-12	Ambiguous item
4.Taking classes for post-sec job value activities	48	47	-1	24	36	+12	
5.*Involvement in school or out of school	43	65	+22	42	12	-30	Informal emphasis
6.Extra-curricular	43	47	+4	18	30	+12	
7.Summer job or part-time job	39	43	+4	59	60	+1	
8.*getting Money for post-sec	52	62	0	48	30	-18	part of Student finance
9.Working out problems	43	47	+4	30	30	0	
10.Obtaining training, education, or experience	56	65	+9	18	24	+6	
11.Getting a job afterwards	56	65	+9	48	59	+11	
12.Doing things to become a good worker	47	87	+43	53	47	-6	Interviewing - fulfilling school responsibilities
13.Out of knowledge Real working job	52	52	0	53	71	+18	
14.Abilities	56	47	-9	83	72	-9	
15.*Working Conditions	56	69	+14	78	71	-7	Related to Career Rpt.
16.*Education & training	48	61	+12	54	59	+5	
17.*Need for People	39	61	+22	69	47	-22	Newspaper Activity assessing trends
18.*Entry Methods	39	61	+22	42	36	-6	- career report
19.*Advancement Opportunities	30	70	+40	54	53	-1	- career report
20.Working Day and Week	47	74	+27	48	65	+17	

Response Analysis of Career Exploration

Responses: C - Probably
D - definitely

Item Description Would go you to	Experimental Pre-Test	Post-Test	Net Shift	Control Group Pre-Test	Post-Test	Net Shift	Unit activities
21.Fathers, mothers, uncles, aunts	48	65	+17	53	6	+11	
22.Brothers, sisters, cousins,	26	38	+12	48	53	+5	
23.Friends	57	65	+8	59	71	+12	
24.Coaches (School) other	26	35	+9	12	24	+12	
25.Teachers	83	78	-5	47	65	+18	
26.Counsellors	79	82	+3	54	76	+22	
27.Other Adults (other adults who know & can help guidance	82	96	+14	78	65	-13	Career Report-Interviewing
28.College catalogues, books sent	82	70	-12	71	82	+11	Career Report
29.People in occupation/or at institute	81	100	+19	71	70	-1	Career report
30.T.V. shows, movies, mags How much useful info is obtained?	25	56	+31	53	41	-12	
31.Father, Mothers, uncles aunts	30	21	-9	24	18	-6	
32.Brothers, sisters & other rel.	21	12	-9	18	12	-6	
33.Friends	25	39	+14	18	30	+12	
34.Coaches	30	26	-4	0	5	+5	
*35.Teachers	57	61	+4	24	36	+12	Writing activities related to career booklet
*36.Counsellors	56	73	+27	48	53	+5	Career research
*37.Other adults who know things	57	78	+21	42	24	-18	Writing activities related to career booklet
*38.College catalogues, books materials guide at institt	52	73	+21	48	48	0	Career report
39.People in occupation or	69	78	+9	54	77	+23	
40.T.V. shows movies, magazines	17	26	+9	18	12	-6	

APPENDIX C

Responsive Data (Table 13)

Table 13

Responsive Data (Questions 1-5)
N=5

Question	Responses				Comments
	Yes	No	Can't Recall	Other	
1. Did you have any career education in English 33?	5				
2. What other career education experiences have you had?					
a. Career Factory	4			1*	*Resource Room helped me to understand myself and my abilities (one response)
3. How did you feel about the CDI as a measuring instrument? (two responses)					
a. Hard to understand	3*				*Confusing - more than one answer right. (one response)
b. Boring	2				
c. Could guess	1				
d. Too specific to one	4				*You might be thinking of more than occupational group before making a making a final decision on a career (4 responses)
4. Did you do your best on the CDI on:					
a. pre-test		4	1		*I think I tried harder on the one because I came to realize that it might be important later on. (one response)
b. post-test	4				
c. neither					
d. both	1				
5. Did you change your preferred occupation during the study (10 weeks)	3	2*			*My choice is the same, but I don't think it will be my first serious career. (one response)

Table 13 (ctd)

Responsive Data (Questions 6-11)
N=5

Question	Responses Yes	No	Can't Recall	Other	Comments
6. Did you change your preferred occupation since the study has ended?	1*	4			*I was going to be a hairdresser, the same as my sister, (Also in the study) but now I've decided to go to Red Deer College and become a Rehabilitative Aide. (one response)
7. Do you think that you would have responded differently if you had been in your final year during the study?	1*	4			I was in grade twelve, but not my final year - I'm upgrading. (one response)
8. What was your mark a. on the Career Booklet? 70-80 80-90	5				
b. On the course? 60-70 70-80	4 I				
9. Were there any questions on the departmental exam related to careers?	4		I		*A business letter (4 responses)
10. Do you think the, "Road Ahead," helped make English 33 more interesting, or less interesting?	5*				Something new and different (1 response) More interesting, but it dragged on too long. (4 responses)
11. Would you have done this career exploration on your own?		5*			*No, I wouldn't have thought about it. (one response)

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